

THE CLEAR SKIES INITIATIVE: A MULTIPOLLUTANT APPROACH TO THE CLEAN AIR ACT

HEARING BEFORE THE SUBCOMMITTEE ON ENERGY AND AIR QUALITY OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED EIGHTH CONGRESS

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THE CLEAR SKIES INITIATIVE: A MULTI-POLLUTANT APPROACH TO THE CLEAN AIR ACT

TUESDAY, JULY 8, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:02 p.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Burr, Whitfield, Shimkus, Issa, Tauzin (ex officio), Boucher, Wynn, Allen, Waxman, Markey, Strickland, Capps, and Dingell (ex officio.)

Also present: Representative Bass.

Staff present: Robert J. Meyers, majority counsel; Bob Rainey, fellow; Michael Goo, minority counsel; and Bruce Harris, minority professional staff member.

Mr. BARTON. The subcommittee will come to order. If we can have Mr. Holmstead take his seat at the witness table. If our audience would get situated.

Without objection, the subcommittee will proceed pursuant to Committee Rule 4(e) which governs opening statements by members, and the opportunity to defer them for extra questioning time. Hearing no objection, prior to the recognition of the first witness for testimony, any member when recognized for an opening statement may completely defer his or her 3-minute opening statement, and instead use those 3 minutes during the initial round of questioning. Is there any objection? Hearing none, so ordered.

The Chair would recognize himself for an opening statement.

I want to welcome everyone to today's hearing on the Clear Skies Initiative. With Chairman Tauzin, I have introduced this legislation at the request of the President; I introduced it last year and reintroduced it again this year in the 108th Congress. I am pleased to have accommodated President Bush in this regard.

I believe the introduction of the bill has helped initiate a debate not only concerning the proper Clean Air Act policies or the regulation of utilities, but also a debate concerning the proper energy policy to apply to this vital sector of our Nation's economy.

Discussion has only been heightened by increases in the prices of natural gas which we held a hearing on several weeks ago in this committee, the fuel used to power most of the new utilities units constructed over the last decade in this country. While the

Clear Skies Initiative predates the most recent price increase, inevitably environmental and energy policy become linked with the statutory scheme of the Clean Air Act.

We on the Energy and Commerce Committee recognized that fact back in 1990 during the development of Title 4 of the Clean Air Act on which the Clear Skies Initiative was based. In Title 4, multiple policy choices were made concerning various classes of generating units, a proper amount of allocation should apply to each. In other words, we made decisions regarding the relative economic burden each unit or class of units using various fuel types would bear. We then made decisions in the law which ultimately resulted in fuel switching, replacement of certain types of coal by other types of coal. Many members weighed in during this process regarding regional, State, and local economies which might be affected by the new emission reductions. In fact, it was the most extensive part of the direct member input into the Clean Air Act debate, as I recall. However, despite intensive review, and an attempt to accommodate all the interests, all the effects and compliance strategies were in the end foreseeable.

In preparing for this hearing, I thought back to those difficult and arduous debates in the early 1990's. When I reviewed the list of current members of this committee and compared it to those who served on the committee in 1990, I found only eight common names, eight out of 57 members on this committee on both sides of the aisle were members when we last considered the Clean Air Act legislation. Mr. Boucher to my left was one of those, Mr. Dingell, Mr. Tauzin are two others, Mr. Markey and Mr. Waxman, Mr. Bilirakis, and I believe that is all the members. I may be missing one or two.

This fact alone indicates that there is much for this subcommittee to learn as we once again start to consider whether we should legislate in this arena.

There has been a continuous process of review by the administration, including a new analysis that was announced on July 1 using updated information modeling to produce new estimates of costs and benefits, and our witness is going to talk about that today. But that doesn't mean that the Congress and the members of this committee have been a part of that process and have studied that process as it has been ongoing. It is imperative that we have open public hearings in which all the facts and figures concerning the President's Clear Skies Initiative can be put on the table for members to digest. I myself have probably followed it about as close as anybody on the committee and have numerous questions and concerns. For example, I believe that the mercury provisions of the pending bill deserve additional scrutiny. I am aware of the various health studies which have been conducted, but I am also aware of the complex mechanism involved in predicting precise health end points that may emanate from utility stack emissions, given not only other sources of environmental mercury but the complex of deposition, creation of methyl mercury, bioaccumulation of methyl mercury, and consumed fish.

I also believe that we need to review the initiative's reliance on auctioning of allowances. The auction of allowances, although accomplished over many years, is a departure from current structure

of Title 4. Its policy implications need to be fully understood. In addition, I also believe that it is critical that any initiative of this sort contain not only a robust scientific provision, but also ensure the important questions having the impact of regulatory policy be evaluated.

Finally, I believe it is vital that the overall integration of the control programs contemplated by the Clear Skies Initiative within the current Clean Air Act regulatory provisions be reviewed. At its core, the Clear Skies Initiative is not a new idea. Let me repeat that. At its core, the Clear Skies Initiative is not a new idea. Efforts to develop multipollutant legislation affecting utility sector date back at least to 1995, when the Clean Air Power Initiative was initiated by then President Clinton and then Assistant Administrator for Air and Radiation, Mary Nichols, who testified before my subcommittee numerous times. During this initiative, the EPA explored options to expand cap-and-trade systems for utility emissions, including the policies of not seeking further reductions from this sector at all for a certain period of time, as well as creating a Federal safe harbor from further NO_x and SO_x emissions from the power generation sector.

While that initiative was ultimately not successful, at a minimum, clear skies builds upon the base of early discussion attempts to provide additional certainty and predictability and regulatory efforts. I would also note that some progress on associated regulatory provisions has been made with respect to the Clear Skies legislation that was introduced in this Congress. We may need to review all provisions affecting Title 1 programs in detail. After many years of discussion and review, the legal system, which must be seen as heavily biased to endless litigation, any legislation affecting such matters simply must get it right. And this subcommittee, if we are going to move, is going to get it right.

I want to welcome EPA Assistant Administrator Jeff Holmstead and all members of the audience to the first hearing in the House of Representatives on the Clear Skies Initiative. I can assure you, folks, this will not be the last hearing on this subject. Let the education, discussion and review begin.

And with that, I would ask my good friend, the ranking member from Virginia, if he wishes to make an opening statement.

Mr. BOUCHER. Thank you very much, Mr. Chairman. I do have an opening statement. I want to commend you for scheduling this hearing on the administration's Clear Skies Proposal which would make substantial changes in our Nation's Clean Air laws. Since enactment of the Clean Air Act and the 1990 amendments, we have made significant progress in reducing emissions and improving air quality at the same time that the Nation's economy and overall energy use have expanded. From 1970 to 1999, the gross domestic product of this Nation increased by 158 percent, and during that same period, electricity use increased by 148 percent.

Despite increases in energy consumption, our Nation's air is much cleaner today than it was in 1970. During the last 30 years, sensible environmental regulations along with new technology and voluntary actions by our Nation's industry have led to a significant reduction in air emissions, and we are enjoying that reduction today. These improvements in air quality have been largely due to

the success of the 1970-era Clean Air Act and the 1990 amendments.

One of the most noted provisions of the 1990 amendments was the innovative cap-and-trade program that was instituted with the goal of reducing SO₂ emissions. Through implementation of cap-and-trade, sulfur dioxide emissions have declined by 39 percent since 1990. The administration's Clear Sky's Proposal seeks to build on the success of the SO₂ program by instituting a similar cap-and-trade program for NO_x and one for mercury emissions. The proposal sets two phases of reductions with overall reduction targets of 67 percent for NO_x and 69 percent for mercury by the year 2018. In addition, the Clear Skies legislation would further reduce SO₂ emissions by 73 percent.

The Clear Skies Proposal has provoked strong opposition from the conservation community which asserts that the proposal would do little, if anything, to enhance overall air quality, and that in some respects it could hinder a continuation of the air quality improvement trend that this Nation has enjoyed for the past 30 years. Proponents suggest that cap-and-trade can work for NO_x and for mercury just as it has worked for SO₂, and argue that Clear Skies would promote a genuine improvement in air quality. During this hearing and subsequent ones before the subcommittee on the administration's Clear Skies Proposal, we will examine this spectrum of view points so that a well-informed decision can be made on the administration's proposal at some future time.

I want to commend the chairman for scheduling this hearing. I want to thank Mr. Holmstead for joining us here today and the other witnesses for preparing testimony for our use, and I am very much look forward to hearing from them.

Thank you, Mr. Chairman. I yield back.

Mr. BARTON. Thank you, Mr. Boucher.

The Chair wants to correct his opening statement. I said there were only eight members of the full committee that were on this committee back in 1990. And there are at least nine, and we think there may have been 10. So we are going to double check that. But Mr. Boucher and Mr. Markey and I and Mr. Waxman are, so I did get the individuals right.

Does the gentleman from Kentucky wish to make an opening statement?

Mr. WHITFIELD. I am going to waive.

Mr. BARTON. The gentleman waives.

Does the gentlelady from California, Mrs. Capps?

Mrs. CAPPS. I would defer to Mr. Dingell.

Mr. BARTON. Does Mr. Dingell wish to make an opening statement?

Mr. DINGELL. Mr. Chairman, thank you. And I commend you for holding this important hearing.

Mr. BARTON. The gentleman is recognized.

Mr. DINGELL. There are many matters within the jurisdiction of this committee, but few as complex and wide-ranging as the Clean Air Act. The history of this committee's work on Clean Air is filled with extremely difficult and hard fought compromises. Many of us who went through the 1990 amendments have small reason to want to go back into the subject again. Before we turn to the topic

of the President's Clean Air proposal or his Clear Skies proposal, I would note that the last hearing held by this committee on a Clean Air Act matter was 1 year ago. The topic was accomplishments of the Clean Air Act. At that time, I stated the hearing was appropriate, but far from exhaustive in its examination of the progress made since the 1990 amendments. At that time, you indicated that you envisioned that the hearings would be the first in a series of hearings that would be a bipartisan examination of the Clean Air Act.

Although that series of hearings has yet to materialize, I believe that your instincts were correct, and I hope that your intention remains. Because the Clean Air Act legislation is so complex, we need to hear from a wide range of views and a broad range of witnesses commenting on the specifics of various bills before we take actions. Several members of this committee were present during the years and months that led to the 1990 amendments. Most were not. Regardless, we would all do well to remember the very hard work that ultimately led us after many difficult efforts to a successful bill. The preludes to the 1990 amendments took years. The legislative history of those amendments encompasses six volumes and well over 10,000 pages of testimony. Hard work, indeed, but ultimately justified by the results.

Since 1990, emissions of sulfur dioxide have fallen by 24 percent, lead by 50 percent, volatile organic compounds by 16 percent, and carbon monoxide by 16 percent. The bottom line is simple: Our air is cleaner, and it was made so during a period of great economic growth.

We mention this history as a means of urging caution as we consider the President's Clear Skies Initiative, a proposal that would fundamentally alter structure of the Clean Air Act. Although our witness from EPA will attempt to lull us into legislating with a swan song of enhanced environmental protection through so-called streamline regulations, lower-cost industry, and less litigation, I maintain a healthy skepticism of that view, and I am less impressed with the administration's efforts to date.

For example, last week, EPA released a revised and detailed analysis of the Clear Skies Initiative that, not surprisingly, painted a rosy picture. According to Energy Daily in commenting on competing proposals, Mr. Jeffrey Holmstead, our witness today, said: "This sort of analysis that we are showing you today is a result of months and months and months of staff work. We have no intention of doing the kind of work on other legislative proposals."

A very curious position. I think we need to know about other matters and will perhaps have some time to inquire of that matter a little later today.

The implication here that the President's proposal is the only game in town does not bode well for a thoughtful and a thorough inquiry into what changes, if any, need to be made in the Clean Air Act. And they appear to attempt to deny the committee the chance to inquire into other matters and to get intelligent, thoughtful, and well-thought-out responses. For example, how could the environment benefit from the vigorous enforcement of current standards compared to the enforcement of those proposed by the administration? I think EPA ought to be able to tell us. Maybe they don't

know. Maybe they should know. In any event, if they are asked, they ought to be able to tell us.

Amending the Clean Air Act requires balancing protection of the human health and the environment and the protection of economic productivity and growth. Before legislating, we must be certain that such action is warranted; that our air will be cleaner than when we began; and that we will not cause substantial harm to our economic well-being or indeed to the health of our people. We should also be sure that such action will result in better, simpler policy than currently exists. To do otherwise would appear to me to be pure folly. I would note that, as of today, none of the necessary consensus is in place to achieve a major change in the law. And I would note something else. Starting out on a piece of legislation without achieving a measure of intelligent consensus is to impose risk on all, on the environment, on the environmentalists, but also on industry. And industry will not have an easy time of getting a decent piece of legislation upon which there is not proper prefatory work.

I look forward to the hearing and to many more, and I hope that we will get the answers to the questions that we need on these matters. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Dingell.

The Chair would recognize the full committee chairman, Mr. Tauzin for an opening statement.

Chairman TAUZIN. Thank you, Mr. Chairman. And today is an auspicious day, and I think we ought to make mention of it. Today is the birthday of the ranking minority leader of the committee, Mr. Dingell. And I think we all ought to join in wishing you a very happy birthday, Mr. Dingell.

As you know, John is the dean of the entire House, and so we want to extend to you, John, our best wishes for this birthday and for your continued good health and success.

Almost 13 years ago, in fact, I sat in this very room not far from the seat I sit in today. It was about 5 o'clock in the morning, and for most of the previous 24 hours the members of our committee, including the distinguished ranking minority leader, was sitting on one side of the witness table. There were various members of the Senate sitting on the other side along with their staff, and we were working away that night inch by inch, line by line through the 1990 Clean Air Act amendments. We worked, as I said, all night long until 5 o'clock in the morning. Sometimes we compromised, and sometimes we simply exerted the will of the majority on tough votes. Finally, I think in the middle of that night we, with a few hand shakes, the deal was finally done and we filed a conference report and got the bill to the floor in the waning hours of the 101st Congress.

I bring these memories up today not simply to reminisce, but because the subject matter of this hearing is quite simply the most sweeping amendments to the Clean Air Act since that enactment in 1990 of those enormous changes to our Clean Air laws. While this committee has acted several times in the last decade regarding various provisions of the act, the Clean Skies Initiative seeks to implement major innovative changes to the Clean Air Act which

would indeed have a substantial effect for most of this decade, as well as the next.

Now, the Clear Skies Initiative attempts to build on the attempts of the Acid Rain Program and to extend the cap-and-trade system used in Title 4 of the Clean Air Act to the regulation of sulfur dioxide, noxious oxide, and mercury from nearly all power plants operating in the U.S. Each pollutant would be subject to a phase reduction resulting in emissions fully 70 percent below current levels. This level of control would be on top of the 5-million-ton reduction in sulfur dioxide emissions and 2-million-ton reductions in nitrous oxide emissions that we have obtained from this sector over the past 10 years. The Environmental Protection Agency projects that this Initiative would by itself, largely provide for national compliance with the fine particulate standard, vastly reduce the areas of the country subject to ozone nonattainment, and virtually halt the further acidification of lakes around the country and certainly the lakes in the Adirondack.

The total health benefit are projected at \$110 billion by the year 2020. The agency projects that the early compliance with the mandated reductions would help produce over \$50 billion in annual health benefits by the year 2010.

Now, this initiative obviously is not without its critics. They have made themselves known in various public forums. The Clear Sky Initiative has been criticized as, quote, worse than current law, end quote, and a rollback of existing standards. In support of these statements, various projections have also been made about how the existing Clean Air Act could be implemented over the next 10 to 15 years, how its various provisions would either be triggered by petitions or litigated, how future EPA administrators would theoretically act, and how and when future courts of law might, in fact, make decisions. I intend to carefully assess these criticisms and the data and analysis upon which they are based. But let me also say, I have heard much of this before.

It is a truism on Capitol Hill that nearly every proposed amendment to every proposed environmental law can do no right, while nearly enacted statute can do no wrong. And throughout the legislative process leading up to the 1990 amendments, we heard those same criticisms. After enactment, it appeared we had stumbled upon the legislative equivalent of the Holy Grail. I don't know if the Clear Skies Initiative rises to that status, and this hearing is a first step to review and better understand its complexities and the resulting impact on the Clean Air Act upon public health and upon the environment. I have made no decision regarding the future course of this proposal in the committee, as I know the chairman of the subcommittee has similarly made no decisions yet. But I also believe that the subcommittee is obviously and must obviously commit itself to a consideration and review of this proposal and then decide a precise course.

It appears we have much to learn about this detailed and ambitious undertaking, and this is a good first step. I do know that a considerable amount of effort has already taken place to this point, and the Clear Skies Initiative, as a whole, attempts to be a balanced and well-reasoned proposal. That is a good start. Now, let us hear from our distinguished witness, and at least begin to make

our individual assessments and see if we can't stumble upon another holy Grail.

Thank you, Mr. Chairman.

Mr. BARTON. I thank the chairman.

Does the gentlelady from California wish to make an opening statement?

Mrs. CAPPS. I do.

Mr. BARTON. The gentlelady is recognized for 3 minutes.

Mrs. CAPPS. Thank you, Mr. Chairman, for calling this hearing today.

As was just stated by Mr. Tauzin, we have made great strides in reducing air pollution since Congress enacted the Clean Air Act; yet, much remains to be done. When it comes to clean air, our priorities should be simple: To cut air pollution that is causing tens of thousands of premature deaths, creating heart and lung problems in senior citizens, and giving kids asthma. We must do it expeditiously.

American families shouldn't have to wait any longer for clean air, but that is what happens under the so-called Clear Skies Initiative. As a public health nurse, I have serious concerns with the President's plan. For example, rather than enforcing the Clean Air Act, the President's plan would delay current deadlines for particular areas to achieve clean air. This extension would force millions of Americans to continue to breathe unsafe air. We have national Clean Air standards to protect the health of all Americans, but many areas of this country still do not meet those standards. EPA estimates that 82 million people live in areas with dangerous levels of fine particles. More than 133 million Americans live where the air is unsafe to breathe because of ozone pollution.

Under the Clean Air Act, these areas will have to meet the Clean Air standards by 2009. The President's plan extends the deadline to 2015 for most of these areas. It also eliminates the tools the Clean Air Act provides to help areas clean up and meet their deadlines. If an area does not achieve Clean Air by 2015, the clock starts over, and the area does not have to be cleaned up until 2022. That is 13 additional years of dirty air.

The administration's plan also eliminates the tools to help areas clean up their air and meet these deadlines. This will make continued pollution problems more likely.

It is clear. Delaying the goals of the Clean Air Act will not make our air cleaner or protect our health. And we must not delay the cleanup, because the public health impacts of air pollution are stunning. EPA estimates that air pollution results in hundreds of thousands of asthma attacks. Each year, fine particle pollution causes tens of thousands of premature deaths. Ozone and particulate materials are responsible for an estimated 20,000 annual hospital admissions from respiratory and cardiac illnesses. Ozone created by emissions from power plants has caused an estimated 7,000 emergency room visits per year due to asthma and other breathing difficulties, and triggered an estimated 600,000 asthma attacks. These effects fall hardest on our children and on our elderly. Children breathe more rapidly than adults, have more lung surface area for their body size. Pound for pound, children breathe 50 percent more air than adults do. With it, more air pollution. As a

grandmother of three young boys that live in California, two of whom have experienced asthma, one serious enough to be hospitalized, I was particularly concerned by a recent study of college freshmen that were lifelong residents of California. The study found a strong relationship between lifetime ozone exposure and reduced lung function. Another recent study found that when the air pollution worsens, more children stay at home due to respiratory illnesses.

Mr. Chairman, during my 20 years as a school nurse, asthma cases more than doubled. Just last year a new study showed that ozone actually causes children to develop asthma in addition to triggering attacks in those already having it.

I expect Mr. Holmstead is going to talk about the terrible effects of air pollution, but the administration seems more interested in repealing Clean Air Act requirements—

Mr. BARTON. The gentlelady needs to wrap up her statement.

Mrs. CAPPS. [continuing] than protecting people's health. We saw this when the administration rejected the multipollutant approach that EPA proposed in August 2001. I look forward the the testimony of our witness today.

Mr. BARTON. I thank the gentlelady.

Does Mr. Issa wish to make an opening statement?

Mr. ISSA. I will waive at this time.

Mr. BARTON. The gentleman waives.

Does Mr. Markey wish to make an opening statement?

Mr. MARKEY. Can I pass at this moment?

Mr. BARTON. The gentleman waives.

Does Mr. Shimkus wish to make an opening statement?

Mr. SHIMKUS. Yes, I do, Mr. Chairman.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

Clear Skies does something past Clean Air efforts failed to do. It ties reductions in emissions to potential impact on energy use and cause. We know that stricter environmental standards will increase energy cost and increase our reliance on foreign fuels. Clear Skies is drafted in a way that reduces those increases while still providing for a cleaner environment. Clear Skies provides a balance between our environment and our energy policies. And I appreciate the comments from Mr. Boucher on the 1990 amendments in which he addressed the issue of the cap-and-trade system which has been very, very successful. And I think we need to remember that.

I also remember the hearing of last year which talked about the benefits of the Clean Air Act. And I think during that hearing I stressed that there were some disadvantages. In my State, 13 mines have closed, 3,000 mineworkers are out of employment. Especially in the areas of Illinois, Kentucky, Ohio, West Virginia, those States have been hit tremendously hard by the Clean Air Act. And this is an attempt to get that balance, to make sure that we can move forward on Clean Air without the destructive effects of just unilaterally disarming ourselves in the rural areas and the poor areas of southern Illinois.

A perfect example is EPA. If EPA proceeds with the mercury MACT proposed rule, we will see that utilities will fuel switch from coal to natural gas. And what is the major No. 1 issue that we have

been talking about and energy related in the last 6 weeks? The high cost of natural gas. That will lead to an even greater increase in natural gas prices than we are currently seeing today. Clear Skies gives each plant the flexibility to choose the pollution reduction strategy that best meets their needs. That flexibility is not part of the mercury MACT proposed rule. Clear Skies will lead to a cleaner environment without large increases in fuel costs, and without all the gloom and doom we are hearing from the environmental community.

I look forward to hearing Mr. Holmstead's testimony, and I yield back the balance of my time, Mr. Chairman.

Mr. BARTON. The gentleman yields back the balance of his time. Does Mr. Waxman wish to make an opening statement?

Mr. WAXMAN. Yes, Mr. Chairman.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. WAXMAN. We have made progress on air pollution over the past 30 years because Congress adopted a tough Clean Air Act for EPA and the States to carry out. We still face serious air pollution problems; 133 million Americans breathe unhealthy air; acid rain and haze are harming our parks; and we have yet to tackle global warming. But the administration bill that we are going to consider today would repeal, delay, or gut many existing Clean Air Act requirements, allowing more pollution for years longer than current law requires. For example, under the Clean Air Act, areas must meet the health standard for particulate matter by 2009. The Bush bill slips the 2009 deadline until 2015. If the area still isn't clean by 2015, it has until 2020 to come up with a plan. And the plan doesn't even have to aim for healthy air until 2022. That is 13 years after the current deadline, a whole generation of children would suffer harmful air pollution.

Similarly, the Clean Air Act requires power plants to control their toxic air pollution by 2007. The Bush bill repeals this requirement, providing only some mercury reductions by 2010 and 2018. The Bush bill guts current protections for downwind States, repeals the new source review for power plants, and eliminates protections for parks and wilderness areas until a power plant is virtually next door.

Mr. Holmstead is going to argue the administration's proposal will reduce emissions more than under the Clean Air Act, at least for a little while. But when it comes right down to it, Mr. Holmstead is really saying, trust us. Just last week the Washington Post reported the Bush administration is withholding critical information related to this bill. And I have a poster of the Washington Post story. They refuse to release benefits estimates for Senator Carper's bill showing it more effective than Clear Skies. They play the same game with Senator Jeffords' Clean Power bill, and now they are manipulating information on mercury. Months ago, EPA promised to model the mercury reductions. EPA abruptly canceled the modeling. We asked them for the analysis over 6 weeks ago. We haven't received it.

If Clear Skies really were better for air quality, it wouldn't have to delay the Clean Air deadlines. If the Clear Skies bill really addressed pollution transport, it wouldn't have to remove backstop provisions protecting downwind States. If Clear Skies really

achieved greater mercury reductions, the administration would release modeling for the mercury rule. If Clear Skies really was the superior policy choice, the administration would give Congress analyses of competing proposals.

Mr. BARTON. The gentleman needs to wrap up his statement.

Mr. WAXMAN. The administration calls this the Clear Skies Act. That is good marketing, but the reality is that this bill is terrible for air quality, and should be opposed by every member of this committee.

Mr. BARTON. We thank the gentleman. Does the gentleman from Maine wish to make an opening statement?

Mr. ALLEN. I do, Mr. Chairman.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. ALLEN. Thank you. I do represent Maine. We are in the far Northeast, so we have a different view of air pollution than some people who don't have the wind of the entire country blown toward them. Clear Skies has always seemed to me a triumph of marketing over substance, because in many cases, including the one I am going to talk about, mercury, it will not clean up the air as quickly as the strict enforcement of existing law.

I call your attention to the chart on the board. The Bush plan, the Clear Skies, really does mean more mercury because it weakens mercury protections in the current Clean Air Act. Current law requires EPA to issue maximum achievable control technology standards for coal-fired power plants with compliance due by the end of 2007. In December 2001, the EPA told the Edison Electric Institute that the Clean Air Act's max standard could reduce power plants' mercury emissions by 90 percent, from 48 tons to 5 tons nationwide, by 2008. And so that is what that chart shows in the pale green.

The Clear Skies plan would delay any mercury reductions to 2010, and then allows 26 tons in 2010 and 15 tons in 2018. That is more than five times as much power plant mercury pollution through 2017, and three times as much mercury each year after that, indefinitely. And we are talking about a serious health hazard, especially to pregnant women and their fetuses. Forty-four States now have advisories against the consumption of fish. We are talking about a very serious problem.

And I will say that in contrast to my friend from Illinois who talked about the risk of significant fuel switching, there are control technologies out there. They are being tested. And I am just going to read an article, a paragraph from an article in the American Coal Council, of all places, on mercury control technology. And here is the paragraph:

Recent full-scale demonstrations have proven the effectiveness of powdered activated carbon injection for reducing mercury emissions for different coals and control configurations. Results indicate that this near-term technology will be well-suited to be retrofitted on existing coal-fuel boilers. It requires minimal new capital equipment, can be retrofitted without long outages, and is effective on both bituminous and subbituminous coals. Because of the promise shown by PAC injection to control mercury emissions from all types of coal, it appears unlikely that compliance with pending mercury reduction regulations will result in significant fuel switching.

We have the technology today, it will be commercially available by 2008. There is no reason to back off from the standards in the current Clean Air Act. And, Mr. Chairman, I yield back.

Mr. BARTON. We thank the gentleman.

Does the gentleman from Maryland wish to make an opening statement?

Mr. WYNN. Thank you, Mr. Chairman. I will defer at this time, and I would like to request unanimous consent to submit.

[The prepared statement of Hon. Albert Wynn follows:]

PREPARED STATEMENT OF HON. ALBERT R. WYNN, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF MARYLAND

Mr. Chairman, I look forward to hearing the Administration's position on the Clear Skies Initiative. As an avid supporter of a cleaner environment, this discussion on the Clear Skies Initiative will provide Members with the opportunity to discuss the merits of the proposal. It appears that it is the intention of every Member to reduce pollution. However, the key question is how we are going to get there.

The Clear Skies Act attempts to reduce air pollution through the expansion of emission cap and trade programs. The program tells the entire industry when and how much to reduce pollution by establishing a maximum cap on emissions. Many believe the cap and automatic penalties for noncompliance ensure that the environmental goal is achieved and maintained while providing market value and certainty.

At the same time, I am concerned that the bill appears to roll back existing public health laws for meeting emission standards along with measures protecting local air quality.

The bill delays cleaning up air pollution by up to a decade compared to current law. This forces residents of heavily-polluted areas to wait years longer for clean air compared to the existing Clean Air Act.

I also have concerns about the Mercury reduction provisions in the bill. Mercury pollution that is spread through the air and water is linked to several public health problems such as birth defects, neurological damage to fetuses and young children, lung damage, fatigue, weight loss, gastrointestinal problems, and behavioral and personality changes. In addition, mercury-contaminated fish can poison the public. The Administration's plan cuts mercury emissions by 69%. I am concerned about the Administration's plan because compared to current law, the Clear Skies plan would allow three times more toxic mercury emissions.

According to the Chesapeake Bay Foundation, each year about 97.5 million pounds of nitrogen comes from air deposition; mostly from power plant smoke stacks and vehicle emissions. This represents about one third of the Bay's nitrogen load and is a significant problem. Nitrogen oxides are major components of acid rain. The Clear Skies Initiative guarantees to reduce nitrogen emissions by 58% in 2008 and 67% in 2018. In light of the toxic effect that nitrogen has on the environment, the time frame for the reduction levels should be more aggressive. For this reason, supporters of the Chesapeake Bay have argued that the Clear Skies proposal is too weak.

I am hopeful that this will be the beginning of discussions on the clear skies act and not the end. I believe that it is critical that we seek ways to reduce pollution in our air and water. Mr. Chairman, I appreciate your attention to this matter. I look forward to hearing from today's Administration witness.

Mr. BARTON. Without objection. Mr. Markey, I thought you wanted 3 minutes in your questioning. You want to go ahead and do it now? Okay. The gentleman from Massachusetts is recognized for 3 minutes.

Mr. MARKEY. Thank you.

Congress rarely creates perfect public policy. During the Clean Air Act amendments in 1990 and the creation of the Acid Rain Program, we kept protections for local air quality in place just in case there were unintended consequences, because the goal of the Clean Air Act is primarily to protect human health. We made sure that plans were in place to deal with the problems if there were targets

that were missed. And we believed inevitably there would be missed targets.

In contrast, Clear Skies eliminates or significantly changes these protections. With the creation of transitional pollution cities or towns, Clear Skies creates a new class of city or towns with none of the public health protections of current law.

A transitional pollution city or town would be designated based solely on theoretical software models that show the transitional pollution city or town what it could potentially achieve in terms of national air quality standards by 2015, unlike current law, which requires the monitoring of the actual air to determine its quality. So they have a theoretical transition pollution city or town, and then a theoretical model for pollution, which is then established but without the relief in place that would have actual air monitoring.

Further, the transitional pollution city or town would not have to submit any contingency plans to protect public health if, in fact, it failed to achieve clean air by 2015. Right now, contingency plans are the real plans for improving air quality, because we all recognize that very often, despite the best planning, targets are missed.

Not until 2015, 9 years after the implementation of the Clear Skies, would State and local air quality directors have to assess the real state of their air and start to design a plan to deal with any problems. Of course, these plans wouldn't come into effect for a further 3 years, and extension beyond that would always be a possibility, increasing the exposure of the public to unhealthy air that causes asthma and other respiratory diseases. The President, a lot of times through Karl Rove, refers to himself as kind of a Theodore Roosevelt kind of a guy. But Theodore Roosevelt actually had asthma, which is why he appreciated clean air out in the country. Under this bill, the model will be, regulate softly but carry a big inhaler for the 8 million children and the 24 million Americans with asthma.

Mr. BARTON. The gentleman's time has expired.

Mr. MARKEY. I urge a close examination of this legislation.

Mr. BARTON. We thank the gentleman.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF NEW JERSEY

Today we are asked to consider a bill with the almost comically inappropriate name "Clear Skies". We are further asked to substitute the provisions of this bill for the Clean Air Act, a law with a proud history of cleaning up the air that millions of Americans breathe. This is simply another example of this Administration's cow-towing to its friends in industry, and I sincerely hope that our colleagues will see through this farce before the so-called Clear Skies Act negates the progress that we have made in air quality with the Clean Air Act.

In his State of the Union address, President Bush suggested that his "Clear Skies" initiative would cut air pollution from power plants by 70 percent over the next 15 years. While the spin-doctors should be commended on their catchy title for this initiative, in reality the President's pollution-control targets are weaker than current law. Furthermore, most of the targets in this proposal would not become effective until 2010, and not fully effective until 2018. So for the next seven years it's just business as usual with industry spewing more pollutants into our air, resulting in more newborn babies at risk of neurological problems, more children developing asthma, more premature deaths in adults, and let's not forget, more heat-trapping carbon dioxide emissions, since the latter is not even addressed in the so-called "Clear Skies Act".

Although each of these pollutants is of serious concern to air quality, I am especially concerned about the lax approach of this legislation toward reducing mercury emissions. The damaging effects of mercury are well documented. Plain and simply, the Bush Administration's so-called "Clear Skies" bill fails the American public. In fact, the only people who appear to benefit from this legislation are power plant owners. The power sector emits more mercury air pollution than any other major industry, yet it is the only industry not subject to mercury emission standards. The American public has been told that this "new and improved" version of the Clean Air Act will improve air quality around the nation, but this statement is based upon a comparison with current pollutant emissions, NOT with the standards that are due to be set by December of 2004 under current Clean Air provisions. Under current law, power plants must meet the 2004 standards by December 2007. The Clear Skies Act would not require its final caps to be met until 2018!

Although the Majority will argue that the mercury allowance program under their proposal is based on the current cap-and-trade program for acid rain deposition under the Clean Air Act, the fact remains that the Clear Skies bill would simply NOT reduce mercury as quickly, or to the same extent, as current law is projected to. Furthermore, today's bill would seriously undermine regulatory authority at the state and regional levels, in contrast to the current acid rain program for sulfur dioxide emissions, which has been very successful without being such a debilitating influence on States' authority. The so-called Clear Skies Act is nothing more than a "bye" for polluters so that they can avoid emissions reduction improvements and extend the time frame for compliance.

If anything, we should be acting to strengthen air quality standards at this time. With the recent announcement from the United Nations-based World Meteorological Organization that the erratic global weather patterns of the past several years correspond with the predictions of global warming, it is more obvious than ever that this is a real problem that needs to be addressed in the immediate future. Responsible legislation should address this by developing tough standards for carbon dioxide emissions, as well as mercury, sulfur dioxide, and nitrogen oxides.

The so-called Clear Skies Act consistently places the concerns of polluters over the health concerns of the citizens of this Nation, and this should not be tolerated.

Mr. BARTON. Seeing no other members present, the Chair is going to proceed. The members that deferred their opening statements, that were here at the time we had opening statements, will have an additional 3 minutes. All members who come will get 5 minutes.

We want to welcome Mr. Holmstead to the subcommittee, and recognize you for such time as you may consume. Your entire written statement is in the record, so you may summarize. But welcome to the committee.

STATEMENT OF HON. JEFFERY HOLMSTEAD, ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION, ENVIRONMENTAL PROTECTION AGENCY

Mr. HOLMSTEAD. Thank you very much, Mr. Chairman.

It really is an honor to be here today and to appear in front of you again. I had planned to begin by singing a rousing rendition of Happy Birthday to Mr. Dingell. But now that Chairman Tauzin has already recognized this day, I think I will defer in all of our interests.

I have been looking forward to this opportunity for quite some time. And at your invitation, I am going to depart from custom a little bit, and rather than reading a statement, what I would like to do is just give a relatively brief presentation and go through some slides in the hope that we can collectively understand some of these issues a little bit better. And I do hope, in particular, that I can begin to overcome Mr. Dingell's skepticism.

As a number of you have mentioned, the air in our country has gotten significantly cleaner over the last 30 years because of the ac-

tions of this committee and committees in the Senate and actions by the full Congress. And it really is remarkable progress when you look at the reductions in air pollution in the face of enormous economic growth, growth in the use of energy, growth in the vehicle miles traveled by our vehicles.

Over the last 30 years, as we have implemented all of these programs, I think we have collectively learned a lot. The Congress, certainly EPA that has been in charge of these programs, we have learned that some programs have worked extremely well and been highly efficient; we have learned that other programs haven't worked so well. What we have tried to do within the Agency is to take advantage of everything that we have learned over the last 30 years. And the Clear Skies Act proposal is really historic, I believe in the history of environmental law in this country, because it is the first time that an administration has proposed to review carefully a piece of environmental legislation and to expand and modernize and take advantage of the parts that work very well and use those to replace the parts that haven't worked as well. And as a result, what I can guarantee you this morning is, if you adopt Clear Skies, we will get greater environmental benefits, certainly over the next decade, substantially—substantially cleaner air quality in this country. We will do it at the lowest possible cost. If we were to achieve these same benefits using the traditional mechanisms, it would be much more costly. We can do it in a way that provides certainty to the environment so we know exactly and so States in particular can do the air quality planning. It provides certainty to the power sector because they can go to the financial markets and know exactly what their regulatory obligations are going to be.

A lot of you have mentioned concern about natural gas, which is a big concern of ours as well. Secretary Abraham has said, and we agree, that this is one of the most important things we can do to ensure against natural gas price increases, which is important to almost every business in this country, and every consumer who heats his or her house with natural gas. By providing clear targets, clear certainty, what we get is much cleaner air from the installation of advanced control technology on coal so that the utility sector is not driving up the price of natural gas. We can do this in a way that will avoid most of the litigation that we constantly undertake. By taking advantage of the mechanism that this committee debated and adopted by back in 1990—and with some slides here I would like to just show you a little bit more about really what that has accomplished. But if I can, if you can go through—oh. The slide is already up. I am looking at myself up there in the television screen and not seeing the map.

This map you see right now is based on the most recent monitoring data. These are equipment that we have out in the field around the country. It shows the counties that currently do not meet the Clean Air Act standards for either ozone or fine particles. This is something in the order of 350 counties. You will see that California has a pronounced problem largely because of geography and climate. And then east of the Mississippi, almost every major urban area in the country at this point doesn't meet our current—the most stringent Clean Air Act standards we have ever had.

Now, we know an awful lot about this problem, a lot more even than we knew about 10 years ago. And I just wanted to quickly show you this chart. The basic approach of the Clean Air Act is for the Federal Government to set these national ambient air quality standards and then tell States and cities that they have to decide the best way to meet those standards. And they are restricted to what they can do within their jurisdiction. What this chart shows is the breakdown between the sources of the pollution that contribute to fine particle pollution, which we think is the most serious air quality issue, and these are sort of chosen at random. We didn't mean to get all the Midwest cities. This is indicative of every city east of the Mississippi.

The red part of the bar shows the portion of the fine particle pollution that comes from outside the local area, from regional transport. The yellow part is the part that that urban area actually has control over. So, for instance, if you look at Cincinnati in this slide, they can eliminate all of the local, all the local air pollution sources completely and they would still not meet the Federal standards of 15 micrograms per cubic meter. You will see that no matter where we look through the eastern United States, by far the biggest part of the fine particle pollution problem is this regional transport that comes in, really, throughout the eastern United States.

Well, let me tell you another thing we know about that. In all of those cities east of the Mississippi, the single largest part of that—and for those of you who are interested in even more detail, we can provide it to you. But we have a lot of studies showing that the biggest part of that problem is sulphate. And the sulphate emission, the sulphate part of the fine particles comes from SO_2 emissions, and by far the lion's share of the SO_2 , comes from the burning of coal for electric power from power plants. Another big part is nitrate that comes from NO_x emissions. So let me quickly point you to this chart that shows that nationally the power sector is responsible for about 63 percent of the SO_2 . It is actually even higher than that in the eastern part of the United States, responsible for about a fourth of the NO_x emissions. And if you look at that NO_x chart, you see that big green slice is the transportation sector. That part is shrinking over time as the fleet turns over with cleaner cars and cleaner trucks that are in place now. So the power sector, notwithstanding the progress that has been made, continues to be primarily responsible for this regional transport that causes the nonattainment problem in the entire eastern United States, at least in the major urban areas.

Now, as several of you have pointed out, there are mechanisms in the Clean Air Act that will eventually address this problem. And let me just give you an indication and sort of a summary of what that looks like on the next slide, if I can.

This is a time line that captures not every regulatory action but the major regulatory actions EPA takes that will effect the power sector between now and about 2018. Now, almost every one of these steps requires that we go through a regulatory process that you know well. We develop a proposal, we put it out for public comment, we have public hearings. We do a final rule, we get litigation; that litigation drags things on and on. But that is the way the

Clean Air Act has worked relatively well, but it does mean that it takes a long time to address some of these problems.

Now, what I would like to do for just a second is compare this chart with the Acid Rain Program that many of you were involved in developing. And let me just go over a couple of slides to sort of keep this in mind. The other thing to point out about this, if I can, is that it deals with one pollutant at a time. We deal, we have this mercury MACT standard that Mr. Allen and others have mentioned that deals just with mercury. Then we have the ability to use other sections to look at SO₂ to look at NO_x, and we have different timeframes for each of those. So, just keep that in mind.

If I can go to the next slide. This shows on the ground real data about what has happened under the Acid Rain Program with sulfur emissions. On the left is actual measured data showing sulphate deposition prior to the 1990 Act that many of you were involved in. And you can—I think it is fairly obvious from the color scheme, but the darker the red color, the greater the concentration of sulfur actually that is deposited in that area. That is from pre-1990. If you look at the 1999 to 2001 data, on the right side you will see that all of those red areas have shrunk pretty dramatically. We can measure in the environment just how effective this program has been. And as some of you may remember, one of the concerns about the Acid Rain Program is that it would result in so-called hot spots; that you would have areas that actually got worse. In fact, not only EPA but a number of groups have looked at this issue, and this slide demonstrates that while we haven't completely eliminated the problem, we certainly haven't made it worse anywhere; we have made it better everywhere.

Now, one other thing about the Acid Rain Program I just wanted to show you visually. Because it is a market-based program that allows the utility sector collectively to find the least costly way of achieving these reductions, it has turned out to be much less expensive than people envisioned back in 1990. I was peripherally involved in some of those discussions, and I remember discussions about how much the cost would be to impose that cap, about a 50 percent reduction in SO₂ emissions. And back in 1990, EPA estimated the annual cost would be about \$5.7 billion. The industry estimated \$7 billion. Four years later, as people had an economic incentive to go out and find the best ways to reduce these emissions, the most effective ways, the estimates of full implementation went from—again the industry, in this case EPRE which is associated with EEI, that estimated went from \$7 billion a year to \$2.5 billion a year. GAO estimated \$2.3 billion a year. And 8 years later, in 1998, the most recent study, EPRE, estimated its estimate or revised its estimate downward to \$1.6 billion, a very well-recognized think tank, RFF, projects it is about \$1 billion a year.

So in terms of its cost-effectiveness, there is no other tool that has ever been developed that is nearly as cost-effective as this one for controlling stationary sources of air pollution. But just as importantly, it is the most environmentally efficient approach that we are aware of. Under the Acid Rain Program, we know that we have virtually 100 percent compliance. How do we know that? We know that because every stack out there in the country has a continuous emissions monitor. So we monitor on an ongoing basis exactly what

the emissions are. It is completely transparent to everyone. We don't have teams of lawyers, we don't have teams of inspectors. We have a relatively small number of people largely in Washington that monitors these data. And we have other ways of electronically monitoring the monitors. So this is the only program we know of where we can say we have virtually 100 percent compliance. We have never had to bring an enforcement action. It is effectively self-enforcing because it is so transparent. So from a cost perspective, from an effectiveness standpoint, the success of this program that many of you were involved in developing has been absolutely amazing.

So what we have tried to do is think back to that slide I showed you just a second ago that has the time line with all those different things on it. We have tried to consolidate those into a single program that looks like the Acid Rain Program. And that is what I show here on this slide, where we basically tell the industry, all these affected sources, that they have to reduce their emissions of SO₂ from 11 million tons to 3 million tons in two phases, NO_x from 5 million to 1.7 million, mercury from 48 tons to 15 tons. Approximately 70 percent from each of these things across time. And so we know really what this means.

And let me show you what this means environmentally, if I can, on the next page. I am sorry this is a little hard to read. I think you have slides in front of you.

This shows on the top the areas the counties that are——

Mr. WAXMAN. Excuse me, Mr. Chairman. Mr. Holmstead has a lot of charts up here.

Were they given to us with your written testimony?

Mr. HOLMSTEAD. I believe they were, yes.

Mr. BARTON. Well, they were handed out. I don't believe we had them in advance.

Mr. WAXMAN. Well, the rules do require that testimony be given in advance. And we had written testimony given to us in advance without these charts.

Mr. BARTON. The testimony was given in advance. The graphics, I saw for the first time today, but the written testimony has been at the committee level since last week.

Mr. WAXMAN. Mr. Chairman, I don't think Mr. Holmstead is following the written testimony. He is extemporaneously going through some of the points he wants to make, but is not—you are not reading from the written testimony. Are you?

Mr. HOLMSTEAD. No, I am not. I thought it would be most——

Mr. BARTON. And he is not required to read from the written testimony. There is no rule that requires him to do that.

Mr. WAXMAN. And, Mr. Chairman, is this an unlimited time presentation?

Mr. BARTON. I told the gentleman, since he is the first administration witness on this important initiative, that he would be given such time as he may consume.

Mr. WAXMAN. Well, I have no objection to that, although it is unusual. We have never had that before. But it is contrary to the rules to have a written statement given to us in advance that is not part of the presentation or not being followed in the presentation, and graphics that are used that have not been submitted to

us in advance. I am sure these graphics were available before today.

Mr. BARTON. I think it is important, given the complexity of this issue, to give this particular witness ample time to explain it and go into details. This is the first of many hearings. As I said in my opening statement, it is important that we get this right. And one of the ways to get it right is to get the facts on the table. Mr. Holmstead, if not the most authoritative, is one of the most authoritative administration officials on this issue, and it is important to give him opportunity to explain the proposal.

Mr. WAXMAN. Mr. Chairman, I don't quarrel with that, but I hope we will be given ample time to question him so that we can get all the facts out from not just his perspective but from a give and take.

Mr. BARTON. Well, I would point out, it is highly unusual for a member to interrupt a witness who is giving testimony. But I have given the gentleman from California that courtesy.

Mr. HOLMSTEAD. And I am really pleased to stay as late as anyone has questions and to follow up. If you have questions about these slides, I apologize. I thought we had gotten these up a little earlier, but I would be quite happy to go through any questions you might have about—

Mr. WAXMAN. Thank you very much, Mr. Holmstead and Mr. Chairman. I appreciate the willingness to cooperate.

Mr. BARTON. Please continue.

Mr. HOLMSTEAD. And I am nearing the end, but sometimes I get worked up about this. We have all been spending a lot of time—the bulk of the last couple of years working through all these issues. I think I just have three more slides I wanted to walk you through.

This top map shows—again, this is monitored data—counties throughout the country that do not meet the fine particle standard. You will see there are 129 counties that exceed that standard today. We have done the most comprehensive air quality modeling study ever done at the national level to look at the impacts of clear skies along with a diesel rule that we have recently proposed, along with some other actions that States and local governments have taken, and you go in the next 17 years from this top slide, 129 counties to this bottom slide, where other than California—and I am sorry, Mr. Waxman.

California has some unique challenges that aren't really related to the power sector, but other than California, we virtually eliminate the nonattainment problem, and even in these few areas that remain, they are very—the air quality has gotten much better.

So with one exception, each of these areas that still isn't quite into attainment is within one microgram per cubic meter of meeting the standard, and many of you were around back in 1997 when there was substantial debate about how we would ever meet the new PM_{2.5} standard. Now we know with the combination of stringent diesel regulations and the clear skies approach, this multi-pollutant approach, we can go from this top map to the bottom map.

Now, let me show you ozone, and many of you have worked on ozone issues for years and years and know how intractable those

have been. Right now we have 290 counties, home to about 110 million people that live in counties that exceed the new more stringent 8-hour ozone standard. Again, you look out to 2020, and we go way, way down, and, again, even these areas that continue to be out of attainment are much closer.

Now, in the case of ozone, much of this has to do with other things besides just clear skies. In particular the NO_x SIP Call, the mobile source rules that are in place, including some of the ones we have done in the last couple of years, but the combination of these all these things gets you from a situation where today—and I look at the States represented here, and air quality is substantially better everywhere, and most areas come into attainment, or at least they are within shouting distance.

Now, because we use this highly efficient mechanism, let me just go to one more slide to show you, for those of us who are also concerned about energy security and energy diversity in this country, one of the big concerns that we have all had in designing this sort of an approach is really what does it mean. Does it make us overly dependent on natural gas, and the answer is absolutely not. We have analyzed this extensively. The Department of Energy, the Energy Information Agency and the use of coal continues to grow in this country. The chart on the bottom left shows current usage—I am sorry. 1990, 2000, 2020, and the use of coal continues to grow. What happens is it is just well controlled coal. We can break this down by region. Our projections are that you—it stays roughly the same in the Powder River Basin, goes up slightly in Appalachia, goes up substantially in the Interior. I am happy to explain more why that is, but all of these things, we and others have studied extensively.

So we can do this without driving us to natural gas. We can do it without costing jobs, and how do we do it? We do it by using the title 4 approach that many of you were involved in designing to really replace a lot of the other parts of the Act that haven't worked so well.

Now, one last slide, and then I do very much appreciate the extra time you have given me. What we can say categorically is that because of the cumbersomeness of the current Clean Air Act process, we can do very little about the—in particular, the PM_{2.5} problem between now and at least over the next decade. So we look just out through 2010, because of the way our models work, and we can show you in 2010 these are benefits that we would get under Clear Skies that we cannot get under the Clean Air Act. And I am happy to go into as much detail as anybody is interested in going into, but I can tell you that in 2010, there will be almost 8,000 premature deaths avoided that we can't do under the Clean Air Act, and I will go into detail about what we can and we can't do and how long that takes.

Almost 8,000 premature deaths in 2010 alone, and the benefits begin almost immediately because of the way this program works.

When Congress speaks, when Congress puts deadlines and caps in place, markets move, because people know those are in place. If we go through all of our other procedures, what does the private sector do? They litigate, because that is the way the world works. When Congress acts, put these deadlines in place, we know it is

going to happen, and you have got almost 8,000 premature deaths avoided, 5,400 cases of chronic bronchitis, hospitalization, emergency room visits avoided, about 17,000, and nonfatal heart attacks, 13,000 avoided. This is in 2010 alone. These are benefits that we can't get under the current Clean Air Act.

So, again, I very much appreciate the opportunity to present this information, and I am delighted to answer any questions that anyone may have, but I just want to reiterate that by modernizing the Clean Air Act, by moving forward on this important initiative, we can provide greater environmental benefits. We can do it at less cost. We can provide certainty for the environment. We can provide certainty for the industry, and we can ensure that we keep energy prices low for consumers.

Thank you very much, Mr. Chairman.

[The prepared statement of Hon. Jeffrey Holmstead follows:]

PREPARED STATEMENT OF JEFFREY HOLMSTEAD, ASSISTANT ADMINISTRATOR, U.S.
ENVIRONMENTAL PROTECTION AGENCY

I. INTRODUCTION

Thank you, Mr. Chairman and Members of the Committee for the opportunity to speak with you today about the Clear Skies Act of 2003. Based on one of the most successful programs created by the Clean Air Act, Clear Skies is a proposal to substantially reduce emissions of the three most harmful pollutants from power generation—and to do so in a way that is much faster and more efficient than under current law.

As President Bush said in the State of the Union Address, Clear Skies will advance our goal of “promot[ing] energy independence for our country, while dramatically improving our environment.” The Administration is committed to working with this Subcommittee and Congress to pass legislation this year. The widespread support for multi-pollutant legislation to reduce power plant emissions is a strong indicator that the time for action on this critical issue is now. Failure to enact Clear Skies this year will delay important public health and environmental benefits.

This country should be very proud of the progress we have already made in cleaning up our air. According to the Environmental Protection Agency's (EPA) first *Draft Report on the Environment*, since the Clean Air Act was first enacted in 1970, total national emissions of the six most common air pollutants have been reduced 25 percent. Remarkably, this improvement in national air quality has occurred even while, during the same 30-year period, the U.S. Gross Domestic Product increased 161 percent, energy consumption increased 42 percent, and vehicle miles traveled increased 149 percent.

Although we have made much progress since 1970, we still face major air quality challenges in many parts of the country. Clear Skies is the most important next step we can take to address these challenges and achieve healthy air and a clean environment for all Americans. Clear Skies would make great strides towards solving our remaining air quality problems in a way that also advances national energy security and promotes economic growth. It would reduce power plant emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x) and mercury by approximately 70 percent from today's levels and do it faster, with more certainty, and at less cost to American consumers than would current law. With Clear Skies, power plants would emit far less over the next decade than they would under the current Clean Air Act. Because of the innovative cap-and-trade approach used in Clear Skies, power plants would have an incentive to start reducing emissions as soon as Clear Skies is passed, resulting in emissions reductions more quickly than required.

EPA recently updated our analyses of Clear Skies using the most recent air quality data, population census information, and modeling techniques. This modeling represents the most sophisticated, comprehensive, detailed national modeling EPA has ever produced. These analyses reaffirm that Clear Skies would greatly reduce air pollution from power plants while ensuring a reliable, affordable supply of electricity.

When fully implemented, Clear Skies would deliver tens of billions of dollars in annual health benefits, prolong thousands of lives and prevent millions of illnesses each year, provide billions of dollars of economic benefits, and save millions of dollars in health care costs. The added benefit of Clear Skies would virtually assure

attainment of the new ozone and particulate matter standards for much of this country, providing air that meets the new, more protective health-based national air quality standards to millions of people. Achieving the national standards has been a problem that has plagued our nation's communities for decades. Clear Skies would also virtually eliminate chronic acidity in northeastern lakes, reduce nitrogen loading in coastal waters, and help restore visibility in our national parks and wilderness areas.

The Clean Air Act has been, and continues to be, a vehicle for great progress in improving the health and welfare of the American people. The Clear Skies Act substantially expands one of the most successful Clean Air Act programs—the Acid Rain Program—and reduces the need to rely on complex and less efficient programs. The result would be significant nationwide human health and environmental benefits; certainty for industry, states and citizens; energy security; and continuing low costs to consumers.

II. CLEAR SKIES PROVIDES SIGNIFICANT BENEFITS

The heart of Clear Skies is a proven cap-and-trade approach to emissions reductions. Mandatory caps restrict total emissions and decline over time. When fully implemented, Clear Skies would result in a 70% reduction in emissions of SO₂, NO_x and mercury from today's levels. Clear Skies would continue the existing national cap-and-trade program for SO₂, but dramatically reduce the cap from 9 million to 3 million tons. Clear Skies would also use a national cap-and-trade program for mercury that would reduce emissions from the current level of about 48 tons to a cap of 15 tons, and would employ two regional cap-and-trade programs for NO_x to reduce emissions from current levels of 5 million tons to 1.7 million tons.

Although national in scope, Clear Skies recognizes and adjusts for important regional differences in both the nature of air pollution and the relative importance of emissions from power generation. The eastern half of the country needs reductions in NO_x emissions to help meet the ozone and fine particle standards, which generally are not a regional issue in the western half of the country (with the exception of California, which does not have significant emissions from existing coal-fired power plants). The western half of the country needs NO_x reductions primarily to reduce the regional haze that mars scenic vistas in our national parks and wilderness areas, and the nitrogen deposition that harms fragile forests. Recognizing these regional differences, Clear Skies would establish two trading zones for NO_x emissions and prohibit trading between the zones to ensure that the critical health-driven goals in the East are achieved.

Clear Skies also recognizes the special visibility protection measures that have been developed by states participating in the Western Regional Air Partnership (WRAP). Clear Skies would essentially codify the WRAP's separate SO₂ backstop cap-and-trade program, which would come into effect only if the WRAP states did not meet their 2018 SO₂ emissions targets.

Finally, Clear Skies requires tough, technology-based new source standards on all new power generation projects and maintains special protections for national parks and wilderness areas when sources locate within 50 km of "Class I" national parks and wilderness areas.

Significant Public Health and Environmental Benefits

The public health and environmental benefits of Clear Skies present compelling reasons for its immediate passage. EPA's new analysis projects that, by 2010, reductions in fine particle and ozone levels under Clear Skies would result in billions of dollars in health and visibility benefits nationwide each year, including prolonging as many as 7,900 lives annually. Using an alternative methodology, Clear Skies would prolong 4,700 lives annually by 2010. EPA's base methodology for calculating benefits shows that Americans would experience significant health benefits each year by 2020, including:

- 14,100 fewer premature deaths;
- 8,800 fewer cases of chronic bronchitis;
- 23,000 fewer non-fatal heart attacks;
- 30,000 fewer visits to hospitals and emergency rooms for cardiovascular and respiratory symptoms, including asthma attacks; and
- 12.5 million fewer days with respiratory illnesses and symptoms.

Using an alternative methodology, by 2020 Americans would experience 8,400 fewer premature deaths each year.

We have not developed methodologies for quantifying or monetizing all the expected benefits of Clear Skies. Still, under all of our analytical approaches, it is clear that the benefits far exceed the costs. EPA estimates that the monetized value

of the health benefits we can quantify under Clear Skies would be \$110 billion annually by 2020—substantially greater than the projected annual costs of approximately \$6.3 billion. An alternative approach projects annual health benefits of \$21 billion, still significantly outweighing the costs. The Agency estimates an additional \$3 billion in benefits from improving visibility at select national parks and wilderness areas. These estimates do not include the many additional benefits that cannot currently be monetized but are likely to be significant, such as human health benefits from reduced risk of mercury emissions, and ecological benefits from improvements in the health of our forests, lakes, and coastal waters.

Clear Skies would achieve most of these benefits by dramatically reducing fine particle pollution caused by SO_2 and NO_x emissions, which is a year-round problem. Of the many air pollutants regulated by EPA, fine particle pollution is perhaps the greatest threat to public health. Hundreds of studies in the peer-reviewed literature have found that these microscopic particles can reach the deepest regions of the lungs. Exposure to fine particles is associated with premature death, as well as asthma attacks, chronic bronchitis, decreased lung function, and respiratory disease. Exposure is also associated with aggravation of heart and lung disease, leading to increased hospitalizations, emergency room and doctor visits, and use of medication.

By reducing NO_x emissions, Clear Skies also would reduce ozone pollution in the eastern part of the country and help keep ozone levels low in the western portion of the country. Ozone (smog) is a significant health concern, particularly for children and people with asthma and other respiratory diseases who are active outdoors in the summertime. Ozone can exacerbate respiratory symptoms, such as coughing and pain when breathing deeply, as well as transient reductions in lung function and inflammation of the lung. Ozone has also been associated with increased hospitalizations and emergency room visits for respiratory causes. Repeated exposure over time may permanently damage lung tissue.

Clear Skies would help move us from a situation where nearly every major urban area is projected to be out of attainment with the ozone and fine particle standards, to a scenario where only a few major cities would continue to have nonattainment problems. Based on current data (1999-2001 data), 129 counties nationwide (114 counties in the East) currently exceed the fine particle standard and 290 counties nationwide (268 counties in the East) currently exceed the new ozone standard. As a result, 45% of all Americans live in counties where monitored air was unhealthy at times because of high levels of fine particles and ozone. Clear Skies would dramatically reduce that number. By 2020, the combination of Clear Skies, EPA's proposed rule to decrease emissions from nonroad diesel engines, and other existing state and federal control programs, such as pollution controls for cars and trucks, would bring all but 18 counties nationwide (including only 8 counties in the East) into attainment with the fine particle standards and all but 27 counties nationwide (including only 20 counties in the East) into attainment with the ozone standards. Even in the few areas that would not attain the standards, Clear Skies would significantly improve air quality. This would make it easier for state and local areas to achieve the new ozone and fine particle standards. Throughout the West, Clear Skies would hold emissions from power plants in check, preserving clean air in high-growth areas and preventing degradation of the environment, even as population and electricity demand increase.

[See Attached Figures 1 and 2, Attainment with Fine Particle and Ozone Standards]

Clear Skies would also reduce mercury emissions from power plants. EPA is required to regulate mercury because EPA determined that mercury emissions from power plants pose an otherwise unaddressed significant risk to health and the environment, and because control options to reduce this risk are available. Mercury, a potent toxin, can cause permanent damage to the brain and nervous system, particularly in developing fetuses when ingested in sufficient quantities. People are exposed to mercury mainly through eating fish contaminated with methylmercury.

Mercury is released into the environment from many sources. Mercury emissions are a complex atmospheric pollutant transported over local, regional, national, and global geographic scales. EPA estimates that 60% of the mercury falling on the U.S. is coming from current man-made sources. Power generation remains the largest man-made source of mercury emissions in the United States. In 1999, coal-fired power plants emitted 48 tons of mercury (approximately 37% of man-made total). These sources also contribute one percent of mercury to the global pool.

Mercury that ends up in fish may originate as emissions to the air. Mercury emissions are later converted into methylmercury by bacteria. Methylmercury accumulates through the food chain: fish that eat other fish can accumulate high levels of methylmercury. EPA has determined that children born to women who may have been exposed to high levels may be at some increased risk of potential adverse

health effects. Prenatal exposure to such levels of methylmercury may cause developmental delays and cognitive impairment in children. Clear Skies will require a 69% reduction of mercury emissions from power plants.

In addition to substantial human health benefits, Clear Skies would also deliver numerous environmental benefits. Nitrogen loads to the Chesapeake Bay and other nitrogen sensitive estuaries would be reduced, reducing potential for water quality problems such as algae blooms and fish kills. In fact, the Chesapeake Bay States, including NY, VA, MD, PA, DE, WV and DC, recently agreed to incorporate the nitrogen reductions that would result from Clear Skies legislation as part of their overall plan to reduce nutrient loadings to the Bay. Clear Skies would also accelerate the recovery process of acidic lakes, eliminating chronic acidity in all but 1% of Northeastern lakes by 2030. For decades fish in the Adirondacks have been decimated by acid rain, making many lakes completely incapable of supporting populations of fish such as trout and smallmouth bass. The Acid Rain Program has allowed some of these lakes and the surrounding forests to begin to recover; Clear Skies would eliminate chronic acidity in Adirondack region lakes by 2030. Clear Skies would also help other ecosystems suffering from the effects of acid deposition by preventing further deterioration of Southeastern streams. Finally, Clear Skies would improve visibility across the country, particularly in our treasured national parks and wilderness areas, resulting in improvements of approximately two to seven miles in visual range in many areas. For example, in the Southeast, Clear Skies would improve the visual range by two to four miles.

Clear Skies is designed to ensure that these public health and environmental benefits are achieved and maintained. By relying on mandatory caps, Clear Skies would ensure that total power plant emissions of SO_2 , NO_x and mercury would not increase over time. This is a distinct advantage over traditional command-and-control regulatory methods that establish source-specific emission rates but which allow total emissions to increase over time. Like the Acid Rain Program, Clear Skies would have much higher levels of accountability and transparency than most other regulatory programs. Sources would be required to continuously monitor and report all emissions, ensuring accurate and complete emissions data. If power plants emit more than allowed, financial penalties are automatically levied—without the need for an enforcement action. More importantly, every ton emitted over the allowed amount would have to be offset in the following year, ensuring no net environmental harm. This high level of environmental assurance is rare in existing programs; Clear Skies would make it a hallmark of the next generation of environmental protection.

Reasonable Costs and Energy Security for Consumers and Industry

The President directed us to design Clear Skies to meet both our environmental and our energy goals. Under Clear Skies, electricity prices are not expected to be significantly impacted. Our extensive economic modeling of the power industry looked at a broad array of factors to gauge the effects of Clear Skies on the energy industry—and they all show that cleaner air and energy security can go hand-in-hand.

Clear Skies would maintain energy diversity. With Clear Skies, coal production for power generation would be able to grow by 10 percent from 2000 to 2020 while air emissions are significantly reduced. EPA's extensive economic modeling for Clear Skies demonstrates that the proposal's emission reductions would be achieved primarily through retrofitting controls on existing plants. Clear Skies's timeframe and certainty enable the power sector to meet aggressive emission reduction targets without fuel switching. This is important not only to power generators and their consumers who want to continue to rely on our most abundant, reliable, affordable and domestically secure source of energy, but also to other consumers and industries whose livelihoods could be hurt by a rise in natural gas prices. Our analysis shows that Clear Skies would have little effect on natural gas prices.

Under Clear Skies by 2010, more than two-thirds of U.S. coal-fired generation is projected to come from units with billions of dollars of investment in advanced SO_2 and/or NO_x control equipment (such as scrubbers and Selective Catalytic Reduction, which also substantially reduce mercury emissions). In 2020, the percentage is projected to rise to over 80 percent. Cost effective strategies and technologies for the control of sulfur dioxide and nitrogen oxides emissions exist now, and—thanks in good part to the Clear Skies market-based system—improved methods for these pollutants, and for mercury, are expected to become increasingly cost-efficient over the next several years. In fact, the Institute of Clean Air Companies forecasts that the U.S. markets for most technology sectors will remain fairly strong, adding momentum to the air pollution control technology industry. We expect that the Clear Skies

Act will provide great benefits to American jobs in the engineering and construction industries.

One of the key reasons Clear Skies would be cost-effective is its reliance on cap-and-trade programs. Like the Acid Rain Program upon which it is based, Clear Skies would give industry flexibility in how to achieve the needed emission reductions, which allows industry to make the most cost-effective reductions and pass those savings on to consumers. Power plants would be allowed to choose the pollution reduction strategy that best meets their needs (e.g., installing pollution control equipment, switching to lower sulfur coals, buying excess allowances from plants that have reduced their emissions beyond required levels). Like the Acid Rain program, Clear Skies includes banking provisions, enabling companies to save unused allowances for future use. Banking creates a tangible, quantifiable, economic incentive to decrease emissions beyond allowable levels, which EPA projects will result in significant early benefits due to over-compliance in the initial years, particularly for SO₂. It also leads to gradual emissions reductions over time, and therefore a less disruptive transition to tighter emission controls needed to address lingering problems. Based on past experience under the Acid Rain Program, by placing a monetary value on avoided emissions, Clear Skies would stimulate technological innovation, including efficiency improvements in control technology, and encourage early reductions.

EPA's models, however, do not predict this technological innovation. The updated analyses show that mercury control costs would be higher than were estimated last year. We are still in the early stages of understanding how different technologies will affect mercury emissions from power plants because mercury is not currently regulated in the power sector. There is an ongoing dynamic research process sponsored by EPA, the Department of Energy (DOE), the Electric Power Research Institute (EPRI), and vendors specifically aimed at furthering our understanding of mercury control, with new data being made available on a continuous basis.

Over the last year, both EPA and DOE's Energy Information Agency (EIA) used updated information to reassess what mercury emissions levels would be in 2010 after installation of NO_x and SO₂ controls necessary to meet the Clear Skies' SO₂ and NO_x caps (NO_x and SO₂ control equipment also reduce some mercury emissions—i.e., "cobenefit" reductions). Due to differences in assumptions and models, the Administration estimates that these mercury emissions would range from 34 to 46 tons. EIA's and EPA's updated analyses estimate the incremental cost now of complying with the 2010 cap to be \$650 to \$750 million per year.

A key feature of understanding this cost is the Clear Skies' safety valve provision that sets a maximum cost of \$35,000 per pound of mercury emissions. The safety valve is designed to minimize unanticipated market volatility and provide more market information that industry can rely on for compliance decisions. The updated modeling projects that the safety valve provision would be triggered if technology does not improve in the future (the modeling does not include any assumptions about how technology will improve). If the safety valve is triggered, EPA will borrow allowances from the following year's auction to make more allowances available at the safety valve price. The future year cap is reduced by the borrowed amount, and the emissions reductions are ultimately achieved.

EPA believes that, as technology develops, the cost of mercury controls will decrease. If it does not, the new analyses project greater mercury emissions in 2020 than did the 2002 analyses due to the triggering of the safety valve.

Assistance to State and Local Governments

Under the current Clean Air Act, state and local governments face the daunting task of meeting the new fine particle and ozone standards. Clear Skies would substantially reduce that burden. By making enormous strides towards attainment of the fine particle and ozone standards, Clear Skies would assist state and local governments in meeting their obligation under the Clean Air Act to bring areas into attainment with these health-based standards, and provide Americans with cleaner air.

As noted previously, the combination of Clear Skies, EPA's proposed rule to decrease emissions from nonroad diesel engines, and other existing state and federal control programs—such as pollution controls for cars and trucks—would, by 2020, bring all but 18 counties nationwide (including only 8 counties in the East) into attainment with the fine particle standards and all but 27 counties nationwide (including only 20 counties in the East) into attainment with the ozone standards. Even in the few areas that would not attain the standards, Clear Skies would significantly improve air quality. This would make it easier for state and local areas to reach the ozone and fine particle standards.

Clear Skies' assistance to states goes beyond ensuring that power plants will reduce their emissions. Clear Skies relies on a common-sense principle—if a local air quality problem will be solved in a reasonable time frame by the required regional reductions in power plant emissions, we should not require local areas to adopt local measures. Under Clear Skies, areas that are projected to meet the ozone and fine particles standards by 2015 as a result of Clear Skies would have a legal deadline of 2015 for meeting these standards (i.e., will have an attainment date of 2015). These areas would be designated “transitional” areas, instead of “nonattainment” or “attainment,” and would not have to adopt local measures (except as necessary to qualify for transitional status). They would have reduced air quality planning obligations and would not have to administer more complex programs, such as transportation conformity, nonattainment New Source Review, or locally-based progress or technology requirements in most circumstances.

III. IMPROVING THE CLEAN AIR ACT WITH CLEAR SKIES

Clear Skies would improve the Clean Air Act in a number of ways. It would build on the proven portions of the Clean Air Act—like the national ambient air quality standards and the Acid Rain Program—and reduce reliance on complex, less efficient requirements like New Source Review for existing sources. The mandatory emissions caps at the heart of Clear Skies guarantee that reductions will be achieved and maintained over time. In contrast, uncertainties with respect to regulatory development, litigation, and implementation time make it difficult to estimate how quickly and effectively current regulations would be implemented under the current Clean Air Act. The level of SO₂ and NO_x reductions we expect by 2010 with Clear Skies legislation would not be achieved under the existing Act. After that, we know that Clear Skies would achieve significant reductions, while both the timing and level of reductions under the current Clean Air Act are unclear.

Early Reductions

One of the major reasons we need Clear Skies now is that adoption of Clear Skies would provide greater protection over the next decade than the traditional regulatory path. The Clear Skies Act will result in significant over-compliance in the early years, particularly for SO₂, because sources are allowed to bank excess emissions reductions. Because of the incentives provided by the cap-and-trade approach used in Clear Skies, power plants would start reducing emissions almost as soon as Clear Skies is passed. Without Clear Skies, EPA and the states will have to go through regulatory processes to put the necessary emission control programs in place. These regulatory processes take years and are subject to litigation—and power plants would have no incentive to reduce emissions before the outcome of those regulatory processes were known.

As a result, emission reductions under Clear Skies would start years earlier than under the current regulatory approach. Clear Skies' emissions reductions would cost less since EPA does not have statutory authority under the current Clean Air Act to design an integrated program that is as cost-effective as Clear Skies. Every year that emissions reductions are delayed, we delay the health and environmental benefits that would be achieved if Clear Skies were to become law.

Our analysis suggests that the amount of pollution controls that the industry will have to install under Clear Skies over the next decade will stretch the limits of available labor and other construction resources, but can in fact be accomplished while maintaining energy reliability and continuing competitive electricity prices.

Legislation Now Is Better than Regulation Followed by Years of Litigation

Even if Clear Skies is not passed by Congress, power plants will be required to reduce their emissions of SO₂, NO_x and mercury. There is no more cost-effective way than Clear Skies to meet the requirements of the current Clean Air Act or to achieve our public health and environmental goals. We know that, absent new legislation, EPA and the states will need to take a number of regulatory actions, although it is unclear now when the requirements will come into effect or what their control levels will be.

Clear Skies has several benefits over the regulatory scheme that will otherwise confront power generators. Clear Skies provides regulatory certainty and lays out the timeframes necessary for managers to design a cost effective strategy tailored to both their current budgets and future plans. Clear Skies is designed to go into effect immediately upon enactment. Power plants would immediately understand their obligations to reduce pollution and would be rewarded for early action. As a result, public health and environmental benefits would begin immediately and result in emissions reductions more quickly than required. Given Clear Skies' design, it is unlikely that litigation could delay the program (particularly since Congress

would decide the two most controversial issues—the magnitude and timing of reductions). In contrast, under the current Clean Air Act, power plants would not know what their obligations would be until after EPA and states started and completed numerous rulemakings.

Past experience suggests that litigation delays on the regulatory path are likely. Our experience with two cap-and-trade programs—the legislatively-created Acid Rain Trading Program and the administratively-created NO_x SIP Call—illustrates the benefits of achieving our public health and environmental goals with legislation rather than relying solely on existing regulatory authority.

Though we project a great deal of benefits will arise from implementation of the NO_x SIP call, the journey down the regulatory path has been difficult and is not yet over. The NO_x SIP call was designed to reduce ozone-forming emissions by one million tons across the eastern United States. The rulemaking was based on consultations begun in 1995 among states, industry, EPA, and nongovernmental organizations. A federal rule was finalized in 1998. As a result of litigation, one state was dropped and the 2003 compliance deadline was moved back for most states. Most states are required to comply in 2004, although two states will have until 2005 or later. Meanwhile, sources in these states continue to contribute to Eastern smog problems. Although the courts have largely upheld the NO_x SIP Call, the litigation is not completely over. Industry and state challenges to the rules have made planning for pollution control installations difficult, raised costs to industry and consumers, and delayed health and environmental benefits.

In contrast, reductions from the Acid Rain Program began soon after it passed (even before EPA finalized implementing regulations). There were few legal challenges to the small number of rules EPA had to issue—and none of the challenges delayed implementation of the program. The results of the program have been dramatic—and unprecedented. Compliance has been nearly 100 percent. Reductions in power plant SO₂ emissions were larger and earlier than required, providing earlier human health and environmental benefits. Now, in the ninth year of the program, we know that the greatest SO₂ emissions reductions were achieved in the highest SO₂-emitting states; acid deposition dramatically decreased over large areas of the eastern United States in the areas where they were most critically needed; trading did not cause geographic shifting of emissions or increases in localized pollution (hot spots); and the human health and environmental benefits were delivered broadly. The compliance flexibility and allowance trading has reduced compliance costs by 75 percent from initial EPA estimates.

[See 2001 Acid Rain Program Progress Report submitted for the record.]

It is clear from this example that existing regulatory tools often take considerable time to achieve significant results, and can be subject to additional years of litigation before significant emissions reductions are achieved. Under this scenario, there are few incentives to reduce emissions until rules are final and litigation is complete, posing potentially significant delays in achieving human health and environmental benefits.

The Clean Air Act contains several provisions under which EPA will be required to impose further emission controls on power plants in order to enable states to meet the new national ambient air quality standards (NAAQS) for PM_{2.5} and ozone. For example, Section 126 of the Clean Air Act provides a petition process that states can use to force EPA to issue regulations to reduce emissions of SO₂ and NO_x from upwind sources, including power plants. A number of states have indicated that they intend to submit Section 126 petitions in the near future. However, compared to Clear Skies, this approach will almost certainly involve years of litigation and uncertainty about reduction targets and timetables.

Additional reductions are required from power plants through the regional haze rule's BART (Best Available Retrofit Technology) requirements and forthcoming mercury MACT (maximum achievable control technology) requirements. EPA is required to propose by the end of 2003 a MACT standard for utility mercury emissions that must be met, plant-by-plant, by every coal-fired utility with unit capacity above 25 megawatts. EPA is required to finalize this rule by the end of 2004. The Act generally gives sources three years within which to comply with MACT standards. This compliance obligation could be delayed by a court if EPA's rule is challenged.

Because these regulations will be the product of separate federal, state and judicial processes, comparable health and environmental protection is likely to cost more under the current Clean Air Act than under Clear Skies. EPA estimates that a comprehensive, integrated approach relying on cap-and-trade programs could reduce costs by one-fourth as compared to the regulatory approach achieving comparable emission reductions. These cost savings would be passed on to the public through lower electricity prices and greater profitability to investors and owners of electric generation.

New Source Review

Some have suggested that Clear Skies is an attempt to undermine the Clean Air Act. This is simply not true. To achieve the next generation of environmental progress, we must build on the successful provisions in laws that have served us well—and learn from those provisions that have not served us well, or have had only limited success. New Source Review (NSR) is an example of a program that EPA and stakeholders have long recognized is not working well.

There is a misconception that the principal goal of the NSR program is to reduce emissions from power plants. This is simply incorrect. Reducing emissions from power plants is the principal goal of Clear Skies. The NSR program is triggered only when facilities emitting large amounts of air pollution are built, and when modifications at these facilities result in significant increases in air pollution. The NSR program is not designed to result in nationwide reductions of air pollution from power plants. When it comes to reducing harmful air emissions from power plants, Clear Skies would accomplish more than NSR. Figure 3 illustrates how the coordinated reductions that result from Clear Skies would improve air quality in the air shed that affects the Great Smoky Mountains National Park. In our estimate, such significant regional improvements could not be obtained in this time frame under the NSR framework.

Clear Skies would significantly modify the NSR program for power plants, but contain some important backstops. We expect that existing power plants would not have to go through NSR for modifications. New sources would no longer have to go through the entire NSR process, but some aspects of the process would still apply. Although we believe that with a tight cap on emissions, new sources will always install good controls, we did not want to run the risk that a new source would be uncontrolled. Therefore, as a backstop, Clear Skies would require all new power plants to meet New Source Performance Standards (NSPS) that are set in the statute at levels significantly more stringent than current NSPS levels.

In addition, new power generators locating within 50 km of a Class I area (e.g., national parks or wilderness areas) would still be subject to the current NSR requirements for the protection of those areas. Finally, new power plants will also have to meet the current NSR requirements that they will not cause or contribute to a violation of the national ambient air quality standards.

IV. WINDOW OF OPPORTUNITY

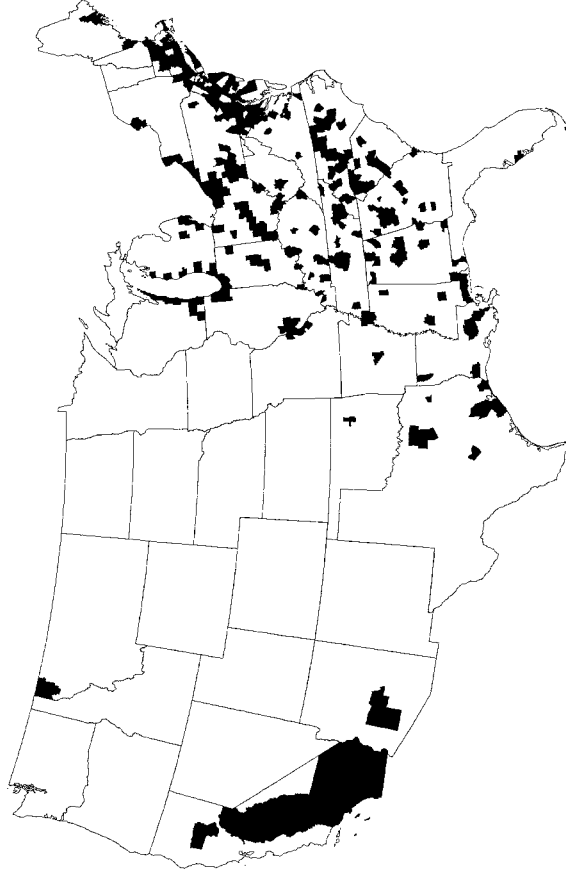
Because of the lessons learned over the last decade, there is increasing support for legislation such as Clear Skies that would significantly reduce and cap power plant emissions and create a market-based system to minimize control costs. From environmental groups to coal companies, there is increasing broad-based support demonstrating that multipollutant legislation is a preferable path to cleaner air. Such an approach would address an array of air pollution concerns associated with power generation—including fine particles, smog, mercury deposition, acid rain, nitrogen deposition, and visibility impairment—at lower cost and with more certainty than currently allowed by the Clean Air Act.

There is no better time for Congress to be considering multipollutant legislation. President Bush has indicated that Clear Skies is his top environmental priority. The number of proposals being considered by Congress also indicates a consensus behind the basic idea of a multipollutant cap-and-trade approach. Organizations including the National Governors Association, U.S. Conference of Mayors, National Association of Counties, Large Public Power Council, Edison Electric Institute, Adirondack Council, and numerous individual utilities have all expressed support for the scope and framework of Clear Skies. If legislation passes quickly, we will begin achieving emissions reductions and related health benefits now, not years from now. Congress needs to act now so that we do not lose a decade's worth of health and environmental benefits from reducing fine PM pollution, smog, acid deposition, nitrogen deposition, and regional haze. Further, as EPA continues to implement additional forthcoming regulations under the existing framework of the Act, the likelihood of our ability to pursue an integrated program diminishes—and with it diminish the numerous advantages that I have delineated today of an approach like Clear Skies.

Legislation is also needed now to help states with their air quality planning and provide incentives for industry innovation, which, in turn, would lower costs and emissions. Such incentives are particularly compelling this year as we approach the task of reducing mercury emissions from the power industry. If designed correctly, legislation could provide the incentive that spurs technological innovation. When stringent yet flexible mechanisms exist, substantial technological improvements and steady reductions in control costs can be expected to follow.

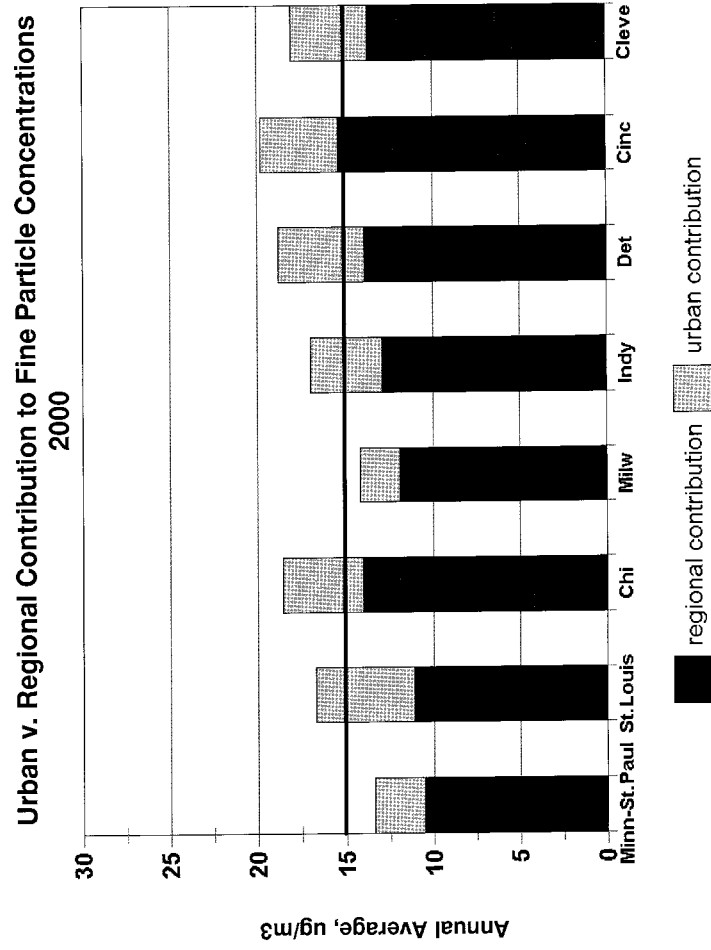
I hope this Congress will concur that there is no better time to pass this important legislation. Every day that passes represents a lost opportunity to reduce emissions and reap human health and environmental benefits. The “regulatory window” is open now, allowing Congress to pass Clear Skies, based on a proven program, before EPA and the states must embark on a more complex and expensive traditional regulatory process. Clear Skies provides a balanced approach that our nation needs for meeting clean air goals, while safeguarding our economy and promoting energy security. In short, Clear Skies is a clear win for the American people.

**Counties Currently Violating Fine Particle ($PM_{2.5}$) and/or
Ozone Standards (based on 1999-2001 data)**

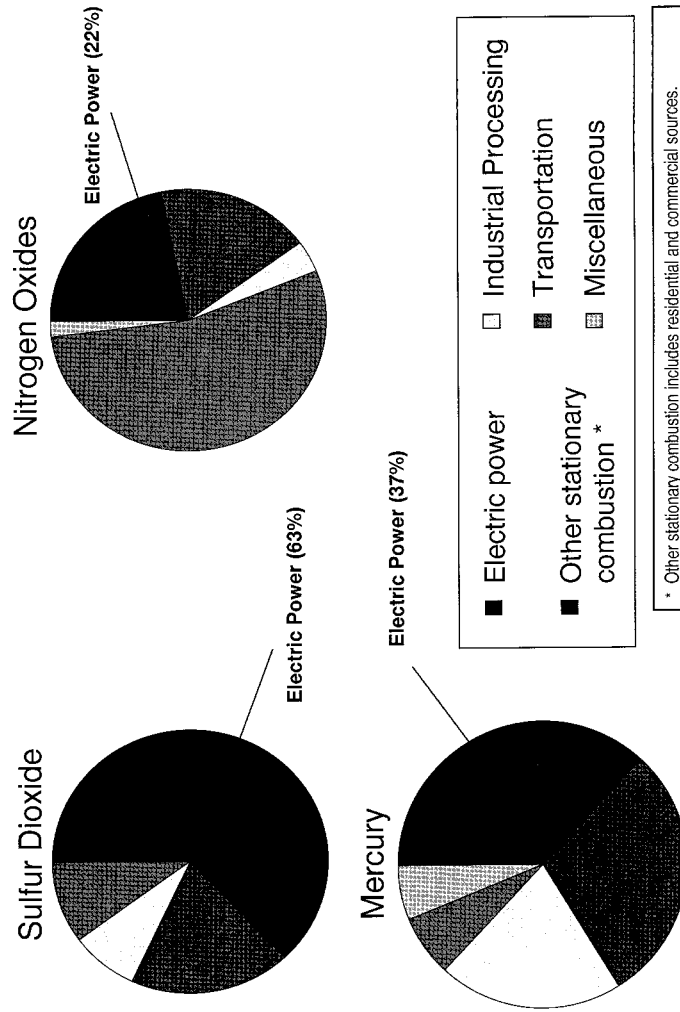


Note: No violating counties in AK, HI, PR, or VI

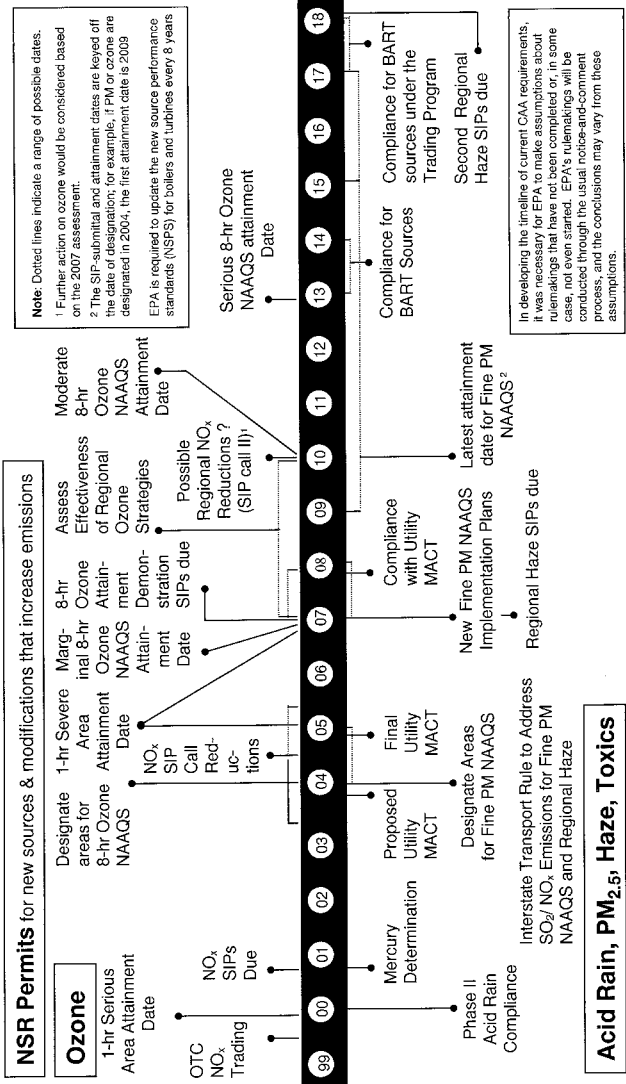
Regional Air Pollution is a Problem



Power Plants are Significant Contributors to Public Health and Environmental Challenges



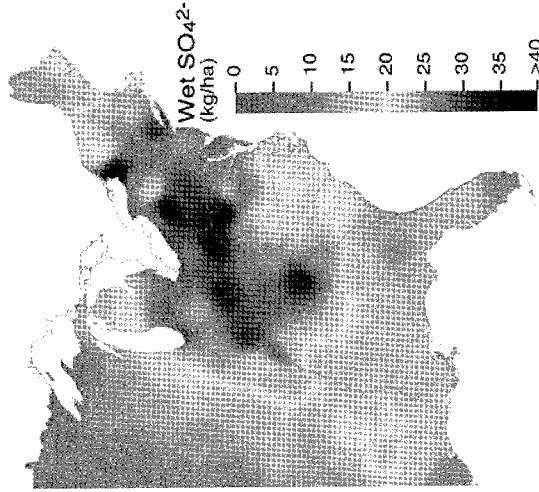
Power Plants Would Face a Complex Set of Requirements Under Current Clean Air Act



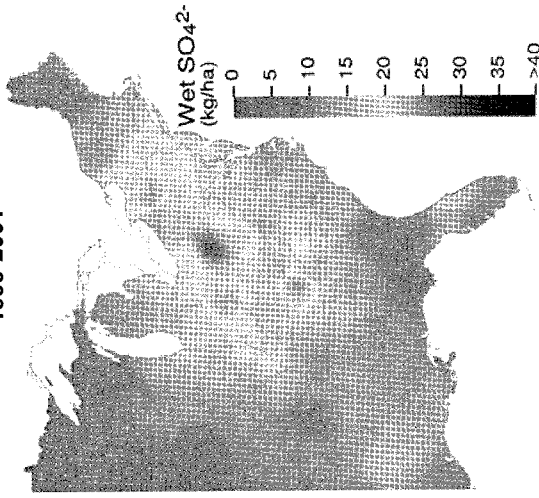
Building on Lessons Learned: Reductions in Acid Rain

Monitored Reductions in Wet Sulfate Deposition Under the Acid Rain Program

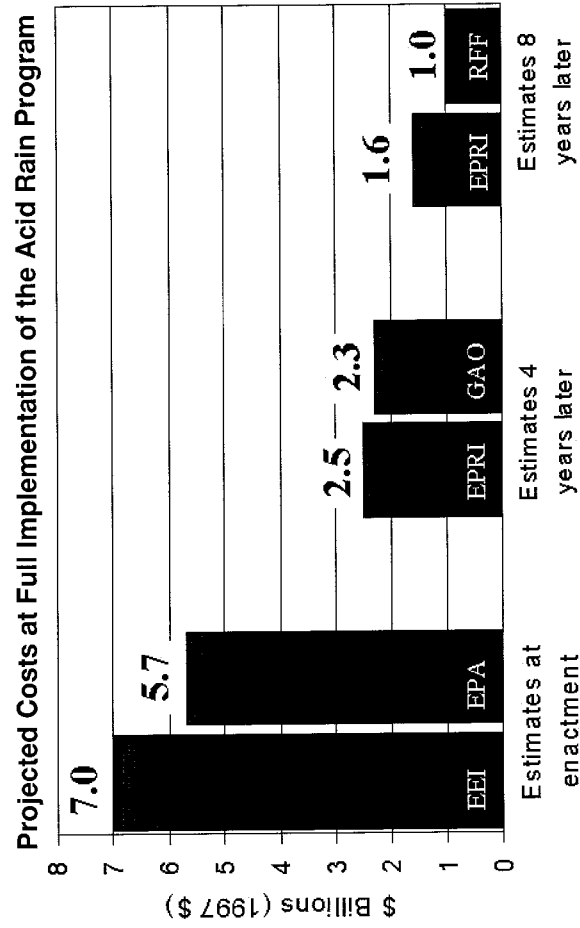
1989-1991



1999-2001



Building on Lessons Learned: Costs Lower than Expected

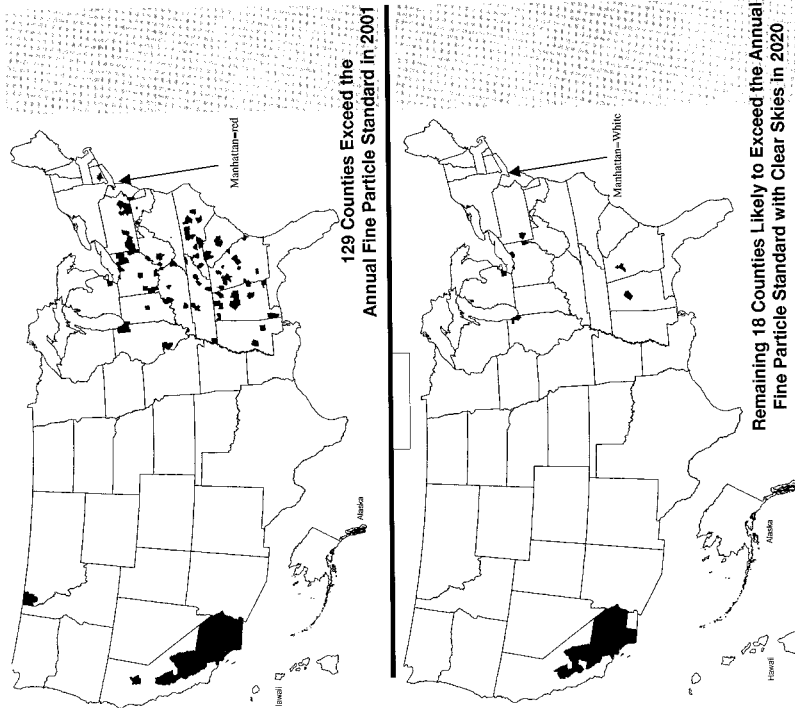


75% Lower than 1990 Projections

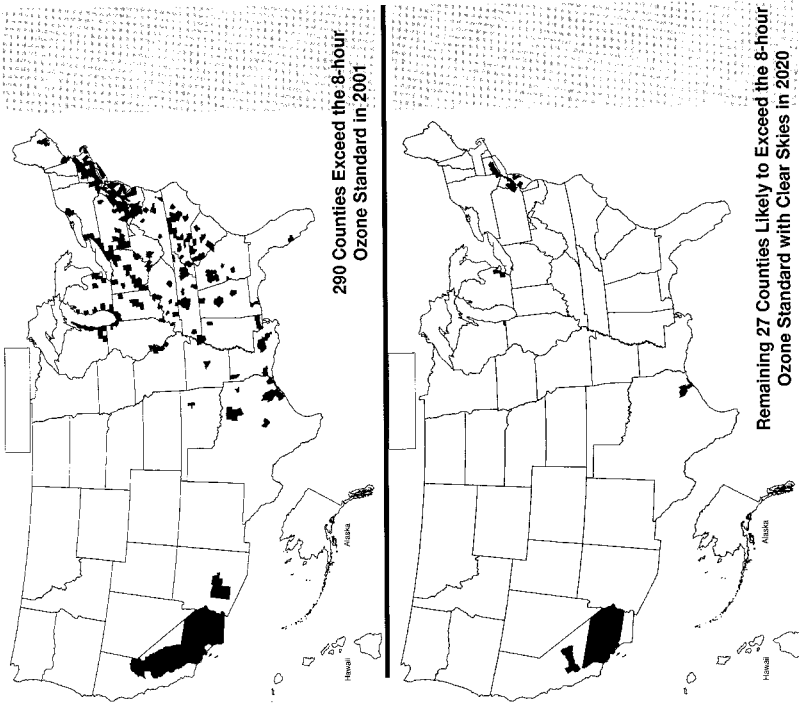
Clear Skies Act: Caps and Timing

	Emissions (2000)	Phase 1 Cap	Phase 2 Cap	Total Reductions at Full Implementation
Sulfur Dioxide (tons)	11 million	4.5 million (2010)	3 million (2018)	73%
Nitrogen Oxides (tons)	5 million	2.1 million (2008)	1.7 million (2018)	67%
Mercury (tons)	48	26 (2010)	15 (2018)	69%

**Clear Skies with
Other Air Programs
Would
Substantially
Improve Fine
Particle Attainment
over the Next Two
Decades**



PM_{2.5} standard = 15 µg/m³

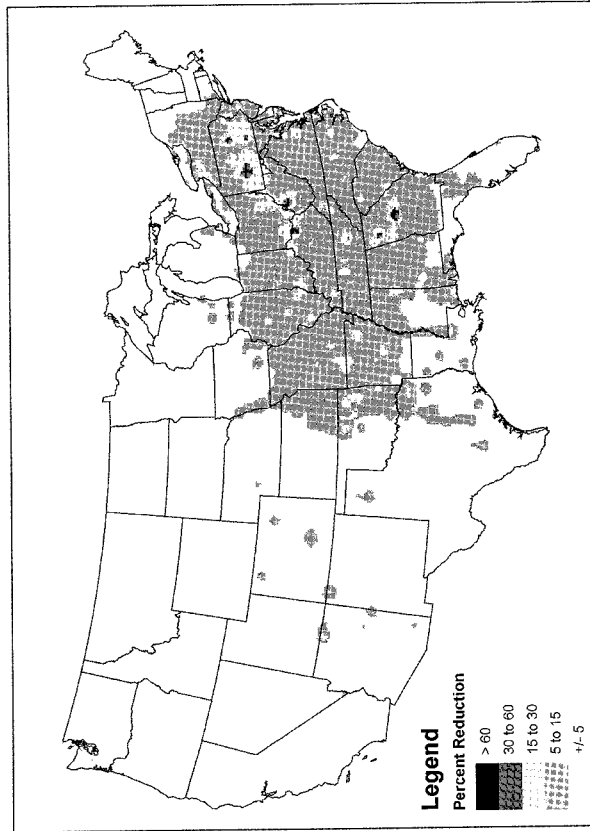


**Clear Skies with
Other Air
Programs Would
Substantially
Improve Ozone
Attainment over
the Next Two
Decades**

8-hour Ozone Standard – 85 ppb

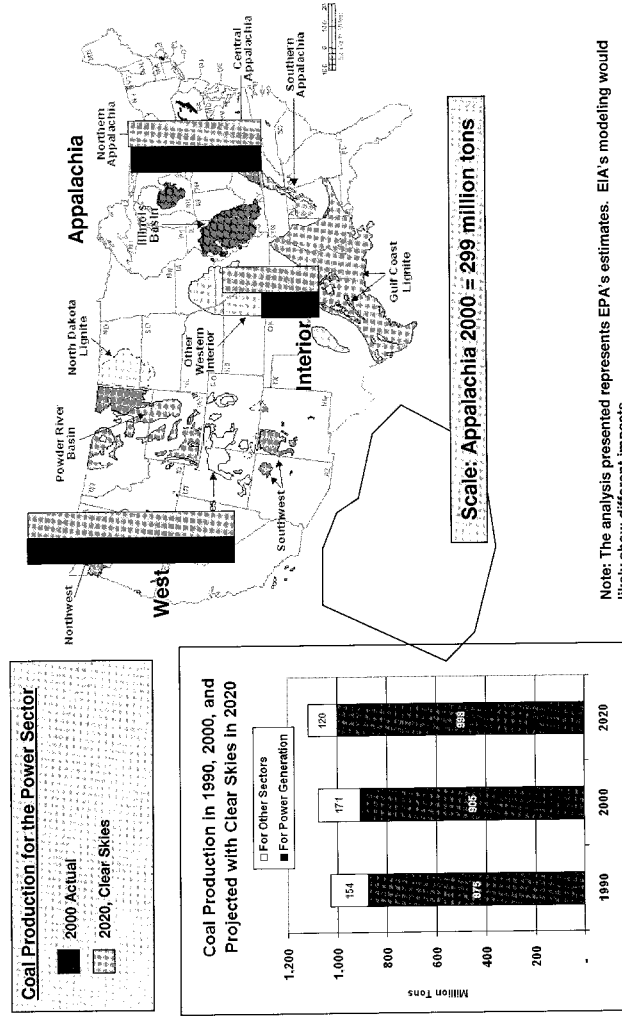
Clear Skies Reduces Mercury Deposition

Projected Changes in Mercury Deposition with Clear Skies in 2020



* Reductions are compared to EPA's Base Case

Coal Production for Electricity Generation in 1990 and 2000 and Projected Production with Clear Skies in 2020



Benefits Begin Immediately Under Clear Skies

Benefit Category	Annual Avoided Cases in 2010
Premature mortality (Alternative estimate)	7,900 (4,700)
Chronic bronchitis	5,400
Hospitalization/ER visits	17,000
Non-fatal heart attacks	13,000

Mr. BARTON. I thank the gentleman for his testimony.

Before we begin, I want to comment on what Mr. Waxman said, because I think it is important that we go by the rules, because we are going to have a number of these hearings. I am reading from page 2 of the committee rules where it talks about requirements for testimony. It talks about rule 4(b)(1), that each witness has to provide their testimony at least 2 works days in advance. This was done. Each witness is given an opportunity to provide a brief oral summary of their testimony.

Then it says the chairman of the subcommittee or the presiding member may waive the requirements of this paragraph or any part thereof, and I did waive the requirement that he had to provide a brief summary, because obviously Mr. Waxman is correct that 15- or 20-minute dissertation is not a brief summary, but I did specifically give him that waiver in my opening welcome to him.

Now, we are going to have a lot of hearings on the Clear Skies Initiative, and I think it is imperative that we comply with the rules, and I also think that we need to keep our wigs on tight and not get all bent out of shape the very first crack out of the box. So the gentleman, Mr. Holmstead, has said he is going to stay and we are going to have at least two rounds of questions and perhaps more if there is an interest in that, because we are going to get the facts on the record.

So the Chair is going to recognize himself for the first 5 minutes of questions. Please start the clock.

Mr. Holmstead, the Clear Skies Initiative, for the first time, regulates mercury, which was not regulated under the Clean Air Act amendments of 1990. Now, when we regulated sulfur dioxide and nitrogen oxide or NO_x and SO₂, we were talking about millions of tons, millions. Mercury from power plant sources, according to your testimony, is right now, in its entirety, 48 tons, not 480 tons, not 48,000, not 480,000, not 4.8 million, not 48 million, 48 tons. So it is completely different order of magnitude in terms of the emissions.

Under the Phase 1 cap under this initiative, it is expected that the requirement for the mercury reduction 2010 which is 7 years from today goes from 48 to 26 tons or a reduction of 22 tons.

Now, when the initiative was put into play, I was told by administration officials that to go from this 48 to 26 ton reduction in 7 years could be done by cobenefits. As utilities put in additional control technology for sulfur dioxide and nitrogen oxide, they would automatically get a cobenefit that would get them down to this 26-ton limit without any extra expenditure. But in testimony to the Senate on June 5, the President's Council of Economic Advisers, represented by Mr. Randall Kroszner, backed away from that and said the cobenefit reduction for mercury wasn't going to take place, that the cobenefit might get down to as low as 34 tons, but might also be as high as 46 tons. Obviously that is a much tougher standard to meet if the industry then has to go in and explicitly put in explicit control technology measures for mercury which currently don't exist.

So what is the deal there? Can we get down to 26 tons in 2010 with cobenefits or are we going to have to come up with some con-

trol technology which doesn't yet exist to try to get down to that Phase 1 cap for mercury?

Mr. HOLMSTEAD. We now believe that there will be some additional costs in order to get down to the 26 tons. It is not purely a matter of, as you say, cobenefits. Our analysis suggests that we get almost all the way there with controls. As you point out, the focus is getting the early NO_x and SO₂ controls, which also get mercury reductions, and we think by—if you do the pure cobenefits, which means, at least the way we think of it, that you have a requirement to control NO_x and SO₂, but you don't have any—you don't even care about mercury. That gets you to roughly 34 tons.

If you are also trying to get mercury, there are things that you can do to optimize those technologies and to change your dispatch and to—maybe some early scrubbing, some early SCRs. That gets you down more in the neighborhood of about 28 tons, but to go from 28 to 26, there clearly is—we estimate about 2 gigawatts worth of activated carbon injection, and I think we think that the true cost of that 26-ton cap is in the neighborhood of \$700 million a year; and both we and EIA have looked at it. I think we agree it is somewhere in the neighborhood from \$700 to \$900 million a year to get those additional tons of mercury in—

Mr. BARTON. Well, if we decide to move forward with this legislation, is the administration open on continuing to look at the mercury issue and come up with some ways to either meet this cap or to give some flexibility on the cap if, in fact, the only way to do it is to develop technology which doesn't yet exist and which is very expensive? If we are going to have a market-based approach, which is the core of Clear Skies, we certainly ought to have a market-based approach on the new pollutant that we are trying to reduce.

Mr. HOLMSTEAD. Yeah. What I think we have said all along is it is really important that we don't just focus on one pollutant. We want to focus on the most effective way of reducing the overall air impacts from the air utility sector, and we believe that the President's proposal is the right one. We do want to work with you and others to make sure that we get a bill that we can get broad support for.

I would mention that it is—for mercury a market-based approach is very important, because perhaps for mercury more than any of these other pollutants, the ability to achieve the reductions where they are most cost-effective means that you can get greater reductions at lower cost. Say, if you were to try to get 26 tons on a plant-by-plant basis, it would be substantially more effective than getting it through a cap-and-trade system.

Mr. BARTON. Substantially more effective or substantially more expensive?

Mr. HOLMSTEAD. I am sorry. Expensive.

Mr. BARTON. You said effective.

Mr. WHITFIELD. Effectively expensive.

Mr. BARTON. My time has expired.

The gentleman from Virginia is recognized.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. We think a lot alike on this subcommittee. The questions I have prepared for Mr. Holmstead were on precisely the same subject. Let

me inquire in a slightly different vein about the rule that EPA will release and draft form in December of this year that the goal of having a final rule published by the following December. This rule also relates to mercury reduction, and I wonder if you could tell us today if your proposed rule for December of this year will have a cap on mercury emissions that is consistent with the cap that you are recommending in the Clear Skies Initiative, and that cap is 26 tons. Can you tell us what your proposed cap is going to be, and if it is going to be different, why would it be different in your rule than it is in your bill?

Mr. HOLMSTEAD. Let me answer first and say because of the way the Clean Air Act works today, we can't do a cap on mercury emissions. For instance, with our proposal there would actually be a national cap that would maintain emissions below a certain level. The way it works under the current Act is we set an emissions standard for every plant, and so as new plants come up, as plants expand their capacity, they could come up again over time. So there is no cap under the current Clean Air Act.

The current Clean Air Act also gives us—unlike the President's bill which looks at all three pollutants, the current Clean Air Act makes us look basically at mercury in this case, and there is a question about other hazardous air pollutants. And we go through an analysis that requires us to look at the total sector, to figure out how to subcategorize that sector into different pieces. For instance, there is a number of different ways to do it, by coal type, by boiler type, and then for every subcategory, we have to look at the data we have on how effective they are now at reducing emissions, and we have to look at the best performing 12 percent, and then we have to set the MACT Standard Act, at least the best—at the average of the best performing 12 percent.

I give you all this detail to say there is not necessarily a relationship between the way we go about setting the standard under the MACT as we go about it under the Clean Air Act, and we are still working through that process now, look at options, looking at different ways of doing the subcategorizing, looking at the data we have because there is a lot of variability in the data.

So even though I am the one, and my staff are the people who are working on this, I can't tell you now what our proposal will look like. I can say that we are committed to meeting the schedule to get a proposal out by December 15, but in terms of how that will relate to the proposal in Clean Skies, it is sort of an apples-and-oranges comparison.

Mr. BOUCHER. Okay. So we are going to have to wait.

Mr. HOLMSTEAD. And I just honestly don't—at this point, we are still working through some difficult issues.

Mr. BOUCHER. Let me ask you this, and this is really a broader question. When the Clear Skies Initiative was proposed, the administration basically said that the goal was to achieve reductions in criteria pollutants in a way that would provide flexibility for industry to meet the new targets, and there was much said about co-benefits, and the fact that when technology is imposed that will reduce SO₂ emissions or NO_x emissions or both, that a collateral benefit from the use of that technology would be to reduce mercury emissions as well, and that it was intended that the mercury emis-

sion reductions largely be taken through the use of cobenefits so that there would not be a separate additional cost for taking mercury reductions.

But the numbers that I am saying that the chairman indicated, and which I have also in my notes, suggests that you are not going to get even close to your cap of 26 tons for mercury reduction in the bill, in the Clear Skies bill, through the use of cobenefits. The Department of Energy says that you get almost no cobenefit from a current emission level of 48 tons down to only 46, a 2-ton improvement and your numbers, while dramatically different, still only get you down to 34 tons from the current level of 48. And that is still a very long way from 26 tons.

So very costly activated carbon injection has to be used to get the balance, and I hear you confirming that in response to the chairman's question today.

So that being the case, you know, it just seems to me that this reality is a major departure from the intent that the administration announced at the time that the Clear Skies bill was introduced. Why this major departure?

Mr. HOLMSTEAD. It is certainly true that as you noted, as we—we work very hard to make sure that our analysis is up to date with the most recent information that we have, and in the case of mercury, as you mentioned, there was currently no program that requires mercury reductions, and so there is not a lot of data out there. And as we updated the data over the last year, we did discover that we were not getting the level of cobenefits that we believed we were getting in the first phase. Now, we continue to believe that those—that the majority of those reductions in the first phase will be achieved by the installation of NO_x and SO₂ controls, and that it is not going to be—it is about—that we do see about 2 gigawatts worth—

Mr. BOUCHER. Where active carbon injection is going to be needed. Well, given the fact that you have just said the—

Mr. BARTON. This will have to be your last.

Mr. BOUCHER. This is absolutely the last one, Mr. Chairman. Given the fact that the level of reduction from cobenefits is not what you initially had thought it would be, does that fact argue for an upward revision in the target in the bill here from 26 tons, perhaps up to 34, which is the level that you now believe you can get from cobenefits, or maybe even to some higher number that might correspond with the Department of Energy projection?

Mr. HOLMSTEAD. We continue to support the President's proposal, although we do acknowledge that our analysis suggests something different than it did when we first introduced that proposal.

Mr. BOUCHER. Thank you, Mr. Holmstead.

Mr. BARTON. The gentleman from Kentucky is recognized for 8 minutes.

Mr. WHITFIELD. Mr. Chairman, thank you very much, and I am delighted that we are embarking on this discussion of the Clean Skies Initiative, and that is as you said the first of many hearings on this subject. I would like to point out as we begin this exploration that—I know there has been a lot of criticism, for example, of the Clear Skies Initiative due to the fact that it will be control-

ling efforts to control only sulfur dioxide, nitrous oxide and mercury, and it is not going to do anything about carbon dioxide, and frequently whenever we have hearings on environmental issues, Clean Air Act specifically, or Clean Skies Initiative, people seem to speak with great certainty of the exact causes of global warming and climate change, and I think as we enter this, it is important for us to remember that more and more literature is coming out questioning the certainty of the causes of climate change and global warming.

For example, we have books out now entitled "The Skeptical Environmentalist" that many of us on this side have been reading, a new book that has come out by one of the leading greens in Europe questioning the models being used. We have *One Moment on the Earth* written by Esterbrook, who was one of the environmental writers for the New York Times questioning the models being used. And then in yesterday's Washington Post, James Schlesinger, who was the Secretary of Energy in the Carter administration, wrote an article entitled "Climate Change, the Science is Not Settled."

And I think it is important that we focus on that just a little bit in these hearings, because certain use media outlets and many involved in these issues speak as if the science is settled, there is no question about it, and yet I would point out that Mr. Schlesinger, in his article, raises serious questions about any certainty on this issue.

As a matter of fact, he points out that—in this article, that since the start of the 20th century, the mean temperature at the earth's surface has risen about 1 degree Fahrenheit, which sounds like global warming, but then he goes on to say, and yet during the Middle Ages, the earth's temperature was 1 to 2 degrees warmer than it is today. And then he goes on to point out that science remains unable either to attribute past climate changes to changes in CO₂, or to forecast with any degree of precision how climate will change in the future.

And then he points out that of the rise in the temperatures during the 20th century, the bulk occurred from 1900 to 1940, and that was followed by the aforementioned cooling trend from 1940 to around 1975. So warming between 1900 and 1940, cooling between 1940 and 1975. And then he went on to say that the global warming, the CO₂ emissions—wait a minute, now. Let me find this a minute. I get so excited about this that I lose my place here every once in a while. Yeah. Just like—

Mr. BARTON. Just like I tell Mr. Waxman, we want you to keep your wig on too, now. We are going to have a lot of these hearings.

Mr. WHITFIELD. Anyway, he points out, moreover, through much of the earth's history, increases in CO₂ have followed global warming rather than the other way around. And then he summarizes this article with the—he says, there is an idea among the public that the science is settled, aside from very limited facts, that remains far from the truth. Today we have a far better instruments, better measurements and better time series than we have ever had. Still we are in danger of prematurely embracing certitude and losing open-mindedness, and I think that is vitally important for us to remember as we proceed, that we do need to have an open mind on some of this, because some of the policies that we are looking

at can dramatically obviously change this country. If we move from our most abundant resource of coal to natural gas, which, as my friend from Illinois has indicated, the price continues to escalate. The capital involved in building additional natural gas plants at a time when utilities are constrained in their capital formation.

Let me just ask this question. I know that—it is my understanding that EPA, in its new modeling, includes an additional 159 gigawatts of mainly gas-fired capacity projected to go online by the year 2005, and it is my understanding also that these are not speculative plans. They either are already under construction, or they have obtained financing, and the effect of building these is going to make—I guess it is designed to make the country less dependent upon coal, and in doing that, will certainly reduce emissions at many existing coal plants. And the hope is that that will reduce the cost to meet the CSA's emission caps and will produce a lower base case level of ozone and particulate matter 2.5.

But if this gas capacity does not come online, for whatever reason due to high prices, lack of capital formation, I was just wondering if you all have given any thought to how much this increase in cost might be for meeting these Clear Sky Initiative emission caps.

Mr. HOLMSTEAD. That is an excellent question, and one that a number of people have asked us. In our modeling, we have projections of a number of things, including future natural gas prices, demand for the growth rate and the demand for electricity, and those obviously are important to predicting the cost of Clear Skies at any particular period in the future.

In order to sort of test the robustness of this whole idea, we also included other analyses that are much more pessimistic, for instance, that have a lot more coal going in, have much higher prices for natural gas, higher demand for electricity, and it changes—it certainly does change the cost but not substantially. Because of the trading feature and the fact that we are using this cap and trade approach, the market continues to find the most cost-effective ways of meeting these caps, and so we can provide you with the exact number, but I am quite sure that even using very conservative assumptions, we show that the total price is maybe about 10 percent higher in 2020 than it would be under our scenario.

So we really think that although—you know, a model is a model. It is pretty robust in terms of how confident we are. So it could be slightly higher, but we don't think it is going to be significantly higher.

Mr. BARTON. The gentleman's time has expired.

Mr. WHITFIELD. Mr. Chairman, I am shocked that my time is already up, but if he would provide me with that information, I would appreciate it very much.

Mr. BARTON. The gentleman is so excited, he gave a 6½-minute opening statement.

The gentlelady from California is recognized for 5 minutes.

Mrs. CAPPS. Mr. Holmstead, in late summer of 2001 before the so-called Clear Skies Initiative was introduced, EPA proposed a plan entitled "A Comprehensive Approach to Clean Power, otherwise known as the straw proposal. Like Clear Skies, the straw proposal included caps on power sector emissions of sulfur dioxide, ni-

trogen oxide and mercury. However, the straw proposal reduced air pollution to much lower levels than under the so-called Clear Skies plan, because the cap levels were lower, and under these lower caps, you would have many fewer health effects.

For example, the straw proposal would establish a target cap for SO₂ at 2 tons in 2010. Clear Skies would cap SO₂ at 4.5 million tons in 2010. And that is a 2.5 million ton difference. EPA's own benefit analysis demonstrates that the earlier and stronger straw proposal would result in clear benefits to public health, 100,000 fewer premature deaths, 2 million or more fewer unnecessary asthma attacks, 15 million or more fewer lost workdays, tens of thousands of fewer unnecessary hospitalizations between now and 2020.

Comparing EPA's own benefit cost analysis demonstrates that the earlier and stronger straw proposal would result in clear economic and health benefits to the public, \$60 billion in more benefits and avoided health care costs per year at an incremental cost of only \$3.5 billion per year in 2020 at full implementation.

Mr. Holmstead, the difference between what you call the Clear Skies proposal, and the straw proposal in public health terms is enormous. Even a few more deaths would be cause for concern, in my view, but allowing thousands more deaths, how can that be justified, especially when the cost would be greatly outweighed by the benefits, as I just mentioned?

My question is what is your justification for changing the straw proposal?

Mr. HOLMSTEAD. We think that the best comparison, the one that we think is most relevant, is to look at the current Clean Air Act compared to anything else, and so what I have tried to do today is to show you how much better than the current Clean Air Act, at least over the next decade, Clear Skies would be. Someone else asked me this question the other day, and I point out that it is sort of a truism that we could achieve substantial health and environmental benefits by closing down all the power plants. No one is seriously considering that, and so the question is between one extreme of doing nothing and the other extreme of closing everyone down, where do you strike the right balance?

The straw proposal that we worked on, that I worked on extensively over a number of months, was specifically designed to be that, a straw proposal to get discussion started, and over the course of learning—I mean, for instance, one of the things that we heard repeatedly after the straw proposal was out on the street was, it is just not feasible for a number of reasons, and when people raise those concerns, we don't take them at face value. We go and study them, and so we now have an engineering study that is up on our Web site. We have a financial study that is up on our Web site, and we determine as you look at feasibility issues, as you look at things like fuel diversity, energy security, you have to strike the right balance, and I would point out that the end goals are not that different.

Mrs. CAPPS. Well, I want that——

Mr. HOLMSTEAD. It is the timing because they just need more time to——

Mrs. CAPPS. Right. I want to push that a little bit further. It was a serious proposal, I am assuming, the straw proposal, but under

the Clear Skies, not everyone comes into compliance, not even under your most recent modeling. Some areas would not come into attainment with the standards. As a result, some people would still suffer health effects. A 2.5 million ton difference between Clear Skies and this straw proposal would certainly have a public health impact. Have you modeled the public health impacts of the straw proposal as well as the costs of which—at which these additional reductions would be achieved?

Mr. HOLMSTEAD. There is no doubt that you would get greater reductions under the straw proposal, but remember it is very important that under the current Clean Air Act, our ability, or anyone's ability to regulate on a regional basis is very limited, so it is really the responsibility of States and local governments. And for each of those areas that are not in compliance in our modeling, we are actually going out today to look at other sources that contribute to that, and as I mentioned, most of those areas are within a microgram per cubic meter of reaching attainment. So if you are looking for local steel plants, other local industries, we think that the combination of Clear Skies and other local controls will get us there.

The other thing I would point out is we get more than 70 percent of the counties into attainment by 2010.

Mrs. CAPPS. May I just make—

Mr. HOLMSTEAD. We can't do that under the current Clean Air Act.

Mrs. CAPPS. But you are asking us something very seriously here, and I want to submit that we need to see an analysis of the lower cap levels under the straw proposal so that we can determine—we hear whether we are striking the right balance for environmental and health protection at a reasonable cost.

Mr. HOLMSTEAD. Okay.

Mrs. CAPPS. That is my question.

Mr. HOLMSTEAD. I am sorry. I believe—in fact, I know that we have given that to you already. We did do an analysis of the straw proposal which we have provided to the committee. So that is out there, the analysis that we did of the straw proposal.

Mrs. CAPPS. And a comparison between that and the Clear Skies Act?

Mr. HOLMSTEAD. Yes. You can look at—I think we have—

Mrs. CAPPS. I guess I haven't seen it on the Web site.

Mr. HOLMSTEAD. I don't think it is on the Web site, but we have provided it to you and to your staff, and the committee has that.

Mrs. CAPPS. So that we can make accurate comparisons between the two?

Mr. HOLMSTEAD. Absolutely. Yes.

Mrs. CAPPS. Thank you very much.

Mr. BARTON. The gentleman from Illinois is recognized for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. I am going to at least initially talk with my colleague, Congressman Whitfield, and mention the book that both he and I have read, the Skeptical Environmentalist, which it is a pretty good book. I was—it was like a textbook, but it is an easy read. He is a statistician but also an environmentalist who just was challenged to look at the stats from the

beginning of time when statistics were kept about all these issues of the environment, and he basically says—comes to the conclusion that things aren't perfect, but they are much better than a lot of people would embrace. So I think prematurely embracing certitude, which my colleague mentioned, is an important point, because it affects cost.

I asked your staff if they would help me, if you would put that slide up on coal production, and I just want to highlight for folks that—it is—if you look at that big blue spot that you can see in the middle, that is the Illinois Basin, and the Illinois Basin is pretty much the entire State of Illinois, hence the reason why members from Illinois are somewhat interested in continuing to use this resource.

There is as much energy there as oil in Saudi Arabia, and that is what people have to remember, and it is an important aspect of why we are trying to—the Clean Air Act, 13 mines were closed, 3,000 United Mine workers lost their jobs, and that is not just those immediate jobs. Just think what it does to small communities in rural Illinois. It wipes them out. The local downtown areas, the town squares, the supermarket, it is a devastating effect, and that is also one of the costs of the Clean Air Act. People have to understand that there are benefits and costs to any type of legislation, and what folks from—who are from coal areas of this country just want to make sure that under additional proposals, there are promises being made that coal production will not be harmed and actually production increases. And we are going to take the EPA at its word. I was going to ask you to comment on that, but I want to move quickly to another slide.

The regional air pollution problem, if we would go there. And the question really is, Mr. Holmstead, that yellow area is the thing that you said, that local regions could affect, and it is my understanding that people have said they affect it by changing the fuel mixture in automobiles for a lot of aspects; is that correct?

Mr. HOLMSTEAD. There is a number of ways to do it. Automobile emissions tend to be a big one. Others—

Mr. SHIMKUS. But isn't the automobile emission one of the most easiest ones for States and regions to try to put into place to affect that yellow area?

Mr. HOLMSTEAD. No, and the reason—

Mr. SHIMKUS. Good.

Mr. HOLMSTEAD. And the reason is when you are dealing with this problem of fine particles, SO_2 is the biggest part of it, and there is relatively little SO_2 emission from—

Mr. SHIMKUS. So why are there 24 different fuel mixtures across this country and three from St. Louis to the Metro East, two different fuel mixtures there, and then Springfield Illinois, another fuel mixture? So why is, in essence, the debate on the balkanization of fuels, which increases the cost, especially when there are price disruptions?

Mr. HOLMSTEAD. That is a very serious issue that we have looked at. There are different types of fuels largely to comply with these ozone standards that have been in place now for many years, and so different formulations can lower the vapor pressure and reduce

evaporative emissions, but those aren't the kind of emissions that are necessarily shown in this graph.

Mr. SHIMKUS. But will that be effective under the Clear Skies? I mean, if we move to a cap and trade system, would that, in essence, limit the amount of the balkanization of the fuel?

Mr. HOLMSTEAD. There are other things that will do that, including proposals that both the House and the Senate will looking at now.

Mr. SHIMKUS. That's right, but they haven't passed those yet.

Mr. HOLMSTEAD. But Clear Skies isn't really going to directly affect that problem that you have raised.

Mr. SHIMKUS. In my 25 seconds left, let me ask—because I also mentioned the mercury MACT rule, and I do believe it will we have got to keep our focus that there's a problem with natural gas in this country. We have had hearings. The Secretary of Energy has talked about it. In your testimony, you mentioned that the litigation would unlikely delay Clear Skies.

What impact would litigation have on the propose mercury MACT rule? Everybody is assuming things are going to roll out per the time line. What affect does litigation have on these requirements?

Mr. HOLMSTEAD. There is a great deal of uncertainty, both on the levels of the MACT and the timing, because any time we do a rule-making of this magnitude, we get at least one round litigation, and in some cases we get litigation up to the Supreme Court, and it gets sent back down again, so it could be no delay at all, but the likelihood is that there would be some delay, and there could be a significant delay. It depends a lot on what we do—what the litigation strategy of the various groups is. But the one thing I can guarantee you is that there will be litigation about a mercury MACT standard if we need to do one.

Mr. SHIMKUS. Thank you, Mr. Chairman.

Mr. BARTON. Thank you.

The Chair recognizes the gentleman from California for at least 5 minutes, perhaps 15 for a series of questions.

Mr. WAXMAN. Thank you very much, Mr. Chairman. I appreciate your willingness to let me explore some of these issues.

Mr. Holmstead, you are a very effective witness.

Mr. HOLMSTEAD. Thank you.

Mr. WAXMAN. You made a presentation that had I just listened to you alone, I would think that is wonderful. We are going to have a modernization of the law, which will bring about greater certainty, both for the environment and industry at lower costs for consumers. We all want that. None of us would, in any way, move away from those goals. What bothers me is that Congress has to rely not just on your good will and excellent presentation and strong support for your position; we have to rely on data and information and modeling, which the EPA has traditionally given to the Congress about various alternative proposals.

We have to rely on that information, but to rely on it, we need to get it. If EPA would have given us information—now, let me just talk about one point. Senator Jeffords and I introduced a bill. It was a bipartisan bill to deal with the power plant pollution. EPA has been unwilling to provide us with information. In May 2001,

Senator Jeffords requested EPA provide him with benefits analysis of his Clean Power Act. Two years later, EPA still hasn't complied with that request.

In April 2002, over a year ago, I requested copies of materials from industry groups that form the basis for the administration's decisions to change that straw proposal to make it weaker. We haven't gotten that information yet. You answered Mrs. Capps by saying that you had given the information to us, but we never got an update on modeling for both the straw proposal and this so-called Clean Skies proposal. That would give us the basis for evaluating which is a better proposal.

It is hard to trust the administration when they don't give us this information. In effect, you make an effective presentation of telling us to trust you. There are a lot of other groups that feel they don't want to go along with this trust, and I would like to put in the record a May 7 letter from 205 State and local conservation organizations, businesses, elected officials informing us that they don't agree with your proposal.

I would also like to introduce a letter from an ad hoc coalition calling themselves Americans for Clean Air. They vigorously opposed the President's air pollution plan, because they say it weakens and delays the existing Clean Air Act. It is a very diverse group. The Northeast States for Coordinated Air Use Management, has serious concerns. The Association of State and Local Air Agencies, these are the people who have to enforce this law, they say your proposal is going to do more harm than good. On top of all that, I have, for the record, more than 75 newspaper editorials from all across the country that express strong concern over the President's proposal.

[The information referred to follows:]

**205 State and Local Conservation Organizations,
Businesses and Elected Officials**

May 7, 2003

U.S. Senate and House of Representatives
Washington, DC 20003

Dear Senators and Members of Congress:

As the Senate and House begin consideration of the President's air pollution proposal, introduced on February 27 by Senators James Inhofe and George Voinovich and Representatives Billy Tauzin and Joe Barton, it is critical that you are aware of our concerns that the bill moves the nation backwards rather than forwards on air pollution. Rather than build on a firm foundation of the Clean Air Act, the President's bill severely undermines that foundation, leaving the public to rely solely upon a system of pollution caps that will allow higher emissions over a much longer period of time than current law. We strongly urge you to reject this approach.

This unfortunate reality is especially evident in the sections of the President's bill that address emissions of mercury, an extremely toxic heavy metal. Much of the mercury pollution emitted into our air ends up in our food chain, accumulating in fish, a staple of the American diet. The problem is widespread: 44 states have posted mercury advisories warning people to limit consumption of fish from 10,179, 247 acres of lakes and 414, 973 miles of rivers.

For those who eat mercury-tainted fish, the health risks are serious, especially for unborn infants and very young children whose neurological systems are developing.

- A recent study by the Centers for Disease Control Prevention estimates that 8 percent of women of child-bearing years in the U.S. have unsafe levels of mercury that put their children at risk for developmental delays, neurological damage and other health problems.
- As many as 300,000 children are born in the United States each year with a heightened risk for health effects related to mercury exposure.

As mercury contamination becomes a more pressing public health issue, businesses that support the recreational fishing industries stand to lose. The sport fishing industry alone generates more than \$100 billion per year in revenues. This figure does not even begin to calculate the risk of mercury contamination to American businesses that depend on a robust market for fish sold in the grocery stores or at restaurants all across the nation, nor does this number begin to value the loss of fish as a source of food for those who rely on it for their families or their way of life.

After years of research, EPA concluded in 2001 that it was necessary and appropriate to set mercury standards under Section 112 of the Clean Air Act for power plants, the largest industrial source, and a source which is currently unregulated. These standards,

which are due to be proposed this year, will be based on technologies that can remove as much as 90 percent of the mercury in coal from power plant smokestacks before it is released into the air, bringing the national power plant mercury load down to roughly five tons per year by 2008. This level of protection is not only possible but absolutely warranted by the severity of the health concerns and the level of the economic threat.

It is therefore alarming that the President's pollution plan eliminates these standards entirely. Instead, the President proposed to impose a national cap on mercury emissions. However, that cap would allow power plants to emit 26 tons of mercury until 2018, after which time they could continue to emit 15 tons of mercury each year. Even at this late date, the mercury levels allowed by the President's plan are three times higher than levels that would result from vigorous enforcement of current law.

The President's plan weakens mercury protections in several other important ways:

- Under current law, coal-fired power plants would have stringent emission limits written into a permit. The President's bill would repeal source-by-source permitting, allowing polluters to "trade" mercury. It also would likely result in mercury emissions increasing at specific power plants, according to EPA.
- Under current law, EPA is required to impose stricter standards if risks to public health remain. The President's bill removes that public health safeguard.
- Under current law, new sources of mercury are required to meet stringent mercury emission limits. Under President's bill, controls would be imposed on new power plants only if "economically and technologically feasible" for the plants to comply.

Please take these concerns into consideration as you prepare to legislate on power plant emissions policy. We strongly urge you to reject any policy that weakens current law for any power plant pollutant and instead insist upon building on the strong foundation of the current Clean Air Act to strengthen public health safeguards.

Sincerely,

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Americans for Clean Air

May 7, 2003

The Honorable James Inhofe
Chair, Committee on Environment and
Public Works
U.S. Senate
Washington, DC 20510

The Honorable Billy Tauzin
Chair, Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Inhofe and Chairman Tauzin:

For over three decades, the Clean Air Act has worked to improve public health and protect the environment. We, the undersigned health, senior's, religious, labor, civil rights, children's, parent's, women's, consumer and environmental organizations strongly support the Clean Air Act and vigorously oppose legislation that will weaken or delay the implementation of the law.

The Clean Air Act is working. By enforcing the law, air pollution levels have dropped at the same time the nation's economy has grown dramatically. The Clean Air Act amendments that you have introduced at the request of the administration would disrupt this progress, harm public health and worsen global warming. If the Clean Air Act is changed, it should be strengthened, not weakened.

Today, the Clean Air Act is designed to protect the health of all Americans. Pregnant women, children, people with heart disease and lung diseases (such as asthma and emphysema), seniors and other populations at risk for diseases like cancer must be protected from the harmful effects of poisonous mercury in our waters, toxic air pollution, smog and soot. America's National Parks and other unique landscapes must be protected from air pollution, haze and irreversible damage to our environment.

The Clean Air Act sets strong standards to cut pollution from power plants and other industrial sources to meet the health-based air quality standards for soot and smog. Power plants are required to sharply reduce their sulfur and nitrogen emissions by the end of this decade. Current law also requires power plants to install state-of-the-art technologies that will deeply cut mercury contamination by 2008.

The Bush Administration's air pollution proposal weakens the Clean Air Act in several important ways. The bill delays deadlines to meet the health standards and relaxes pollution reduction requirements for power plants and other major pollution sources. The proposal repeals the requirement for power plants to install state-of-the-art pollution controls to reduce toxic mercury emissions. Critical states' authority to set strong clean-up standards is repealed. The plan also makes global warming worse by allowing carbon pollution to increase.

The current Clean Air Act provides critical tools that the states and the Environmental Protection Agency can use to achieve clean air. Please do not weaken industry's responsibility to clean up power plants and other smokestacks. Do not postpone the requirements to meet health-based standards. Do not diminish the rights of downwind states to protect themselves from pollution produced outside their borders.

All Americans have a right to breathe clean, healthful air. That is the promise of the landmark Clean Air Act. This promise should never be broken.

Sincerely,

Alpha-1 Foundation
 American Association of People with Disabilities
 American Cancer Society
 American Heart Association
 American Lung Association
 American Public Health Association
 American Thoracic Society
 Asthma and Allergy Foundation of America
 Breakthrough Technologies Institute
 Center for International Environmental Law
 Central Conference of American Rabbis
 Children's Environmental Health Network
 Citizens Coal Council
 Citizens for a Better Environment
 Clean Air Task Force
 Clean Air Trust Education Fund
 Clean Water Action
 Clear The Air
 Climate Solutions
 Coalition on the Environment and Jewish Life (COEJL)
 Consumer Action
 Defenders of Wildlife
 Environmental Defense
 Environmental Defense Center
 Environmental Integrity Project
 Friends Committee on National Legislation
 Friends of the Earth
 Green House Network
 Greenpeace
 Healthy Schools Network
 International Primate Protection League
 Kids Against Pollution
 League of Conservation Voters
 League of United Latin American Citizens
 League of Women Voters of the United States

National Adult Day Services Association
 National Association for the Advancement of Colored People (NAACP)
 National Association of the County and City Health Officials
 National Audubon Society
 National Consumers League
 National Council on the Aging
 National Environmental Trust
 National Parks Conservation Association
 National Wildlife Federation
 Natural Resources Defense Council
 OMB Watch
 Our Children's Earth Foundation
 The Ocean Conservancy
 Physicians for Social Responsibility
 Presbyterian Church (USA) Washington Office
 Public Citizen
 Public Employers for Environmental Responsibility
 Religious Action Forum
 Sierra Club
 Trust for America's Health
 Union of American Hebrew Congregations
 Union of Concerned Scientists
 United Church of Christ Justice and Witness Ministries
 United Methodist Church General Board of Church and Society
 United Steelworkers of America
 US Environmental Watch
 U.S. Public Interest Research Group
 Wildlands CPR
 Women's Environment and Development Organization
 Women's International League for Peace and Freedom
 Woman's National Democratic Club
 Working Assets
 20/20 Vision

CC. The Honorable Jim Jeffords
 The Honorable John Dingell
 The Honorable George Voinovich
 The Honorable Tom Carper
 The Honorable Joe Barton
 The Honorable Rick Boucher



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July 7, 2003

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Hon. Edward J. Markey
 2108 Rayburn House Office Building
 Washington, DC 20515

Hon. Frank Pallone
 420 Cannon House Office Building
 Washington, DC 20515

Hon. Thomas Allen
 1717 Longworth House Office Building
 Washington, DC 20515

Re: Response to Request Regarding Changes to Certain State Authorities under H.R. 999

Dear Representatives Waxman, Markey, Pallone, and Allen:

Thank you for your letter of June 27, 2003 requesting our views about provisions in H.R. 999, "The Clear Skies Act of 2003," that would diminish or eliminate certain state authorities under the federal Clean Air Act (CAA), including the ability of states to pursue relief from pollution transported from upwind stationary sources under Section 126 of the CAA. We are pleased to respond to your request.

We welcome a comprehensive strategy to address pollution from the power sector and believe that the type of emission reductions called for in H.R. 999 can be cost effectively achieved even sooner than the timeframes specified in this proposed legislation and even more effectively with lower caps. As downwind states that are chronically afflicted by pollution transported from upwind jurisdictions, we are very concerned about the substantial limitations H.R. 999 imposes on the ability of such states to attain federal, health-based air quality standards. To the extent that we cannot attain the National Ambient Air Quality Standards (NAAQS), we cannot adequately protect our citizens' health and well being as the CAA requires, and our economies suffer as a result of being designated as "nonattainment." Worse, to the extent that we may be limited in seeking relief from upwind pollution or adopting state emission control measures more stringent than federal requirements, this situation will be perpetuated.

Our initial review of H.R. 999 leads us to have serious concerns not only about changes to Section 126 of the CAA, but also changes to several other rights, privileges, protections, and responsibilities currently held by the states under the CAA. Several of these concerns are detailed in the attached briefing paper; others may be identified following additional review of H.R. 999.

We hope that the attached material responds to your request for our initial views on provisions contained in H.R. 999. If further questions arise or you desire additional information, please don't hesitate to contact my office at 617-367-8540.

Sincerely,

Kenneth A. Colburn
 Executive Director

cc: NESCAUM State Air Directors

BRIEFING PAPER
Provisions in the Proposed Clear Skies Act of 2003 (H.R. 999)
that Alter State Authorities and Protections in the Federal Clean Air Act

NESCAUM – July 7, 2003

OVERVIEW

While the stated purpose of the Clear Skies Act of 2003 (CSI) is to address power sector emissions, there are also provisions in this proposed legislation that, if enacted, would fundamentally change the framework of the federal Clean Air Act (CAA) as it relates to state authorities. These changes would affect how and when states are required to achieve health-based federal air quality standards for ozone and fine particulates – allowing more time and less oversight for many nonattainment areas – and thereby stripping states of proven tools that have helped them to achieve emission reductions and address local air quality impacts.

Specifically, CSI changes fundamental designation and attainment provisions of the CAA. It also materially alters and restricts CAA provisions that allow states to achieve expeditious relief from interstate pollution. These and other changes weaken or remove crucial regulatory tools that states rely upon to address an array of air pollution sources including, but not limited to, power plants. In addition, the environmental benefit that states can secure by adopting programs more stringent than federal requirements appears to be compromised. Taken together, these changes substantially reduce the ability of states to meet their statutory clean air obligations, which can put their citizens' health at risk and jeopardize their economies.

Some suggest that these proposed changes must go hand in hand with the operation of a national multi-pollutant cap-and-trade program. This is clearly not true, because the federal Acid Rain cap-and-trade program for sulfur dioxide (SO₂) emissions has succeeded remarkably without undermining other regulatory programs that improve air quality at the local, state, and regional levels. It is more likely that these changes are being sought because they ease air quality responsibilities for areas that will be newly designated as nonattainment areas under the new 8-hour ozone and fine particulate matter NAAQS. In most cases, in fact, the proposed legislation would excuse these areas from adopting any local controls unless air quality problems persisted after 2015.

Simply put, the power sector emissions reductions proposed in CSI do not justify the additional public health risks created by its much broader regulatory relief provisions. This disconnect is further underscored by the fact that CSI's final emissions caps are significantly delayed (until 2018) and are subject to future revision based on review provisions in the legislation that are highly skewed toward cost rather than protection of public health or environmental quality. Moreover, there is no direct timing linkage between the regulatory relief provided in CSI and new power sector emissions caps. More flexibility than what the CAA offers may indeed be appropriate for addressing 8-hour ozone nonattainment problems – especially given what we have learned about VOC

and NOx controls during the 1990s. But the CSI proposal – by delaying for nearly a decade the CAA’s public health protections for citizens that reside in new nonattainment areas and those who live downwind of those areas – is far too liberal in this regard.

SPECIFIC ISSUES OF CONCERN

1. CSI creates a new category for labeling areas that have unhealthy air quality with respect to the 8-hour ozone or fine particulate (PM_{2.5}) National Ambient Air Quality Standards (NAAQS).

- CSI radically changes Section 107 of the Clean Air Act by creating a new “transitional” designation for certain areas that are monitoring violations of either the federal ozone or PM_{2.5} standard, to avoid labeling them as being in “nonattainment” of those health-based standards.
- The new “transitional” label would allow the new areas to bypass key emission reduction requirements that would otherwise be in force (described below).
- The new “transitional” label would dismantle the legal recourse that downwind areas currently have under Section 107 of the CAA which requires upwind areas that contribute to unhealthy air quality downwind to ensure those emissions are mitigated.

2. CSI changes the scientific basis for how areas across the U.S. are labeled (i.e., “designated”) when they have unhealthy air that does not meet federal ozone or PM_{2.5} standards.

- Under the CAA, attainment or nonattainment designations for an area are based on the air quality concentrations that are actually monitored in that area. Under CSI, EPA would instead assign designations based on the relatively fragile criterion of *anticipated* air quality improvements. EPA would rely on modeling results and administrative submissions to determine which areas that violate health-based standards would be designated as “transitional.”¹
 - Modeling is a useful but inexact tool. While it can and should help guide policy decisions, modeling should not be used to circumvent factual field evidence of poor air quality. Further, the use of modeling rather than monitoring to determine designations creates a double standard (see Item #4) wherein two areas with identical ambient air quality (e.g., one designated pre-CSI as nonattainment and one designated post-CSI as “transitional”) face substantially different economic and regulatory consequences. An area’s

¹ In order to become a “transitional” area, CSI requires a State to submit to EPA a SIP that includes supporting modeling and any local controls that would be necessary to come into attainment by December 31, 2015. That SIP must be approved by EPA by December 31, 2004. While this deadline is significantly shorter than the 2007 deadline for nonattainment areas to submit SIPs, the “transitional” SIP is more administrative than technical in nature. Essentially, CSI gives transitional areas a “bye” on Subpart 1 and/or 2 CAA control requirements in return for their early SIP plans. The problem is that “plans” do not equate to enforceable “reductions.”

ozone problem (or its contribution to a downwind ozone problem) has been successfully addressed only when air quality monitors show the problem is solved, not when models predict that it might be solved.

- The CSI approach – based on easily modified modeling presumptions rather than hard field data – is a significant departure from the current public health protections of the CAA.

3. CSI dramatically extends the deadlines by when many areas must attain federal ozone and PM_{2.5} standards and achieve local emissions reductions.

- CSI allows a minimum of eight additional years – and as many as 15-20 additional years – for transitional areas to attain the 8-hour ozone standard. For the PM_{2.5} standard, CSI allows a minimum of six and as many as 12-17 additional years to attain.
 - Under the CAA and based on EPA’s most recent schedule, marginal ozone areas (which would account for most of the “transitional” areas) must attain the 8-hour ozone standard by 2007. For PM_{2.5}, nonattainment areas are expected to attain the standard by the end of 2009.
 - Under CSI, ozone and PM_{2.5} “transitional” areas are anticipated to attain the standard with federal measures (including CSI’s multi-pollutant program) by December 31, 2015. If they do not do so, they would be presumed to need additional local controls, and they would be designated as nonattainment by June 30, 2017. They would be required to submit SIPs by June 30, 2020 and to attain the ozone and PM_{2.5} standards by 2022 (though they could be granted an extension to 2027). Under CSI, the public health protections intended under the current CAA could thus be delayed for nearly two decades.

4. CSI creates an unlevel playing field in terms of basic requirements for areas that are currently violating the eight-hour ozone standard.

- By avoiding the “nonattainment” label, CSI excuses “transitional” areas from adopting CAA programs that are required for areas violating the eight-hour ozone standard. These programs are primarily aimed at controlling growth in emissions from the power sector and the mobile source sector, including:
 - Transportation conformity
 - Offset requirements for new or modified stationary sources
 - LAER controls for sources subject to nonattainment New Source Review
- “Transitional” areas would be subject to Prevention of Significant Deterioration (PSD) provisions as if they were attainment areas, instead of the more stringent New Source Review (NSR) provisions required of nonattainment areas.

- Incredibly, *attainment* areas in the states of the Ozone Transport Region are currently (and would continue to be) required to implement more local emission controls than *nonattainment* “transitional” areas would have to implement under CSI.
- The practical impact of this dichotomous CSI approach is that different areas with identical monitored air quality concentrations are likely to be treated dramatically differently, depending on when they were classified. This is unfair in terms of economic opportunity and, more importantly, protection of citizens’ health.

5. Under CSI, “transitional” areas are subject to much less rigorous requirements, with less federal enforceability and no “backstop” provisions.

- “Transitional” areas would be excused from the Reasonable Further Progress (RFP) requirements that nonattainment areas are routinely subject to, including the requirement to adopt Reasonably Achievable Control Technology (RACT) measures. Instead, CSI establishes a “maintenance” requirement – essentially another planning requirement – whereby “transitional” areas would submit to EPA by December 2010 an emissions inventory and an analysis showing that growth in emissions is not *anticipated* to affect their ability to attain the 8-hour ozone or PM_{2.5} standard.
 - It is unlikely that Urban Airshed Modeling will be sensitive enough to show a potential problem with predicted growth in emissions.
 - If EPA were to uncover a problem with a “transitional” area’s maintenance analysis, EPA would only be required to *consult* with the state and determine actions necessary to assure attainment. Unlike the current CAA, there is no enforceable requirement that the area implement any of these actions, nor are there ramifications for a state’s failure to do so (such as sanctions). Under CSI, EPA could wait until June 2017 to designate the areas as nonattainment, leaving the public inadequately protected from poor air quality for at least six more years.
- CSI relieves “transitional” areas from the current CAA requirement to ensure that their emissions do not interfere with another area’s ability to attain or maintain the ozone or PM_{2.5} standards
 - “Transitional” areas do not have to develop SIPs that comply with section 110(a)(2)(D).
- CSI relieves “transitional” areas from the current CAA requirement to adopt “backstop” contingency measures and to include them in their SIPs in the event that they do not attain the ozone standard by the 2015 deadline.
 - Under CSI, such areas would not have to adopt control measures until 2020, when attainment SIPs would be due for those “transitional” areas that are reclassified as “nonattainment” in 2017.

6. CSI places a moratorium on the use of Section 126 of the CAA, thus denying states access to a vital tool for relief from transported pollution from upwind stationary sources.

- CSI prohibits EPA from making any finding on any 126 petition for power plants and boilers affected by CSI's trading program prior to January 1, 2009. Under the existing CAA, Section 126 is designed to be a tool for prompt action; EPA must act on any submitted 126 petition within 60 days.
- CSI limits how and when Section 126 can be used. It requires EPA to make findings by January 31, 2009 for all petitions submitted before January 1, 2007.² Again, the CAA specifically allows petitions to be submitted at any time and requires EPA to act within 60 days of receipt.
- CSI requires EPA to extend the compliance date for 126 findings to ensure that no power plants and boilers are subject to *any* deadline prior to January 1, 2012. Under the existing CAA, Section 126 remedies must be in place within three years of the finding.

7. CSI radically changes the criteria on which findings of significant contribution from an upwind stationary source or group of sources are made, perhaps rendering Section 126 unusable.

- CSI requires that all Section 126 findings for power plants and boilers affected by the CSI trading program be based on a consideration of other enacted or pending emission reduction programs – even if they are not yet implemented. This is a significant departure from the current language of Section 126 in the CAA, and again suggests that public health should depend on *anticipated* reductions.
- In a particularly substantive change from the current CAA, CSI prohibits EPA from making a finding of significant contribution unless the petitioning state shows that the upwind emissions reductions it seeks are at least as cost effective as emission controls on other source types (e.g., mobile sources, area sources, etc.) that could be implemented locally or in the upwind area.
 - On its face this test does not seem unreasonable. However, the cost side of this analysis includes the *full* cost whereas the benefit side of the CSI cost effectiveness analysis limits the benefits to air quality improvements in the petitioning state's nonattainment area *only* (i.e., it does not include *all* benefits to *all* areas from action in an upwind jurisdiction). Accordingly, this test significantly biases the cost effectiveness test against the petitioning state. The result is an unbalanced cost benefit test that promises to eviscerate Section 126 as a practical tool for states.
 - Also under this CSI provision, states would not only be required to compare cost effectiveness to other potential state programs, but also to federal

² If enacted, this provision could affect pending one-hour ozone Section 126 petitions filed by DE, DC, MD, and NJ, and pending eight-hour ozone 126 petitions filed by MA, ME, NH, and PA.

programs that states are precluded from adopting on their own. This is likely to put the states in a “Catch-22” position. For example, if controlling heavy-duty engine emissions was determined to be more cost effective than reducing emissions from upwind power plants, downwind states would still be powerless to address the problem due to federal pre-emption of state regulation of heavy-duty engines.

- Finally, state environmental agencies have little current capacity to conduct these economic analyses. As a result, CSI either requires states to increase spending or introduces another major – perhaps insurmountable – roadblock to any future Section 126 action.

8. With respect to power sector mercury emissions, CSI eliminates a plant-by-plant toxic emission control mechanism (MACT) that has proven effective, and replaces it with a relatively loose mercury cap. In addition, CSI dismantles the CAA’s toxics control requirements for non-mercury hazardous air pollutants (HAPs).

- Under the CAA, EPA must promulgate regulations to control power plant emissions of mercury, a toxic heavy metal, by the end of 2003. These regulations must reflect Maximum Achievable Control Technology (MACT) levels of stringency and must be implemented by the end of 2008. Mercury control technologies such as activated carbon injection have been shown to achieve control effectiveness in excess of 90%. By contrast, the mercury caps proposed in CSI are not fully implemented until a decade later than the MACT requirement (i.e., in 2018) and represent at most 70% control effectiveness, on average. In addition, EPA is now predicting that actual mercury levels could remain well above the CSI caps as the result of a “safety valve” mechanism in the proposed legislation that is designed to limit the market price of mercury emissions allowances.
- CSI removes EPA’s current statutory authority to regulate non-mercury HAP emissions from power plants, shifting them to a discretionary program that would not take effect until 2018. Under CSI, all non-mercury HAPs would be regulated under the new and unproven residual risk program, rather than the well-established MACT program.

9. CSI prevents states from accruing additional environmental benefits if they choose to set more protective state emissions caps for their power plants.

- Under its proposed cap and trade program, CSI prohibits any states from “restricting” or “interfering” with the “transfer, sale or purchase” of allowances. If a state wanted to impose a more stringent cap for a power plant or group of power plants, it could do so, but it could not retire or withhold the allowances that accrue from the setting the more protective cap. Those allowances would remain in the CSI program, and could thus be used in an upwind state. In this circumstance, the air quality benefits of the state action to impose more stringent

power plant requirements would be at least partially offset by an increase in the emissions from plants outside and upwind of the pro-active state.

10. CSI jeopardizes states receiving the full benefits of the NOx SIP Call.

The NOx SIP Call program applies to electric generating units and other large industrial sources, whereas CSI's cap and trade program applies only to electric generating units. CSI effectively replaces the NOx SIP Call program and strands the industrial sources outside its broad NOx trading mechanism, requiring them to have their own smaller program. A significantly smaller trading market for the industrial sector would have unintended economic consequences; without the economies of scale of the full NOx SIP Call program, a much less efficient and more costly program for this sector and for the states will result.

11. CSI invites a future Congress to weaken its final power sector emissions caps.

- CSI's mid-course "review" provisions mean that state regulators may not even be able to rely on the power sector emissions reductions that are now being used to sell CSI's myriad regulatory relief provisions. Specifically, CSI requires EPA to review the costs and benefits of proposed power sector caps and to recommend changes to Congress. Both the timing and structure of this analysis -- which features a heavy emphasis on cost considerations and is to be completed by 2009 (i.e., *before* the first phase of CSI's reductions has even been implemented) -- seem designed to open the door to a future weakening of the final caps.
 - If that were to occur, there would be even less justification for the attainment delays and other regulatory relief provisions introduced by CSI.
 - The potential for a future weakening would introduce business uncertainty, encouraging affected sources to delay making the capital outlays necessary to comply with CSI until after the mid-course review process is concluded.
 - It also creates an expectation that is a significant departure from past federal programs.

Jul 08 03 08:58a

Mary Lynn Stone

For inclusion in the record

401-222-4546

p. 1



**OZONE
TRANSPORT
COMMISSION**

July 7, 2003

Connecticut

Hon. Henry A. Waxman
2204 Rayburn House Office Building
Washington, DC 20515

Hon. Edward J. Markey
2108 Rayburn House Office Building
Washington, DC 20515

Delaware

Hon. Frank Pallone
420 Cannon House Office Building
Washington, DC 20515

Hon. Thomas Allen
1717 Longworth House Office Building
Washington, DC 20515

District of Columbia

*Re: Response to Request Regarding Changes to Clean Air Act Section 126
Authorities under H.R. 999*

Maine

Maryland

Dear Honorable Representatives Waxman, Markey, Pallone, and Allen:

Massachusetts

Thank you for your letter of June 27, 2003 requesting our position on the 126 petition provisions of H.R. 999, the proposed "Clear Skies Act." You correctly note that the Ozone Transport Commission (OTC) is in the process of formulating its overall recommendations on the Act, and we expect to complete that work shortly.

New Hampshire

New Jersey

Multi-pollutant power plant legislation is a top priority for OTC, and we are attempting to meaningfully engage the Administration on behalf of our 12 member states and the District of Columbia as to what we believe a multi-pollutant proposal needs to accomplish for OTC to be supportive. We are hopeful such discussions will lead to a bill that makes economic and environmental sense, provides the predictability utilities need, and ensures the ozone attainment potential we require.

New York

Pennsylvania

As to the specific question you pose, the OTC states have grave concerns about the 126 provisions of H.R. 999, as we believe it effectively eliminates use of the 126 petition as a constructive tool for states to deal with transport of air pollution when upwind states or the federal government are unwilling or unable to do so. Member states have used the petition process only once to date, and then only after years of negotiation and multiple attempts to address the transport issue equitably. OTC states know that filing a petition is a serious action not to be taken lightly, but we also believe we should continue to have this tool available to us when necessary, and receive a meaningful and timely response to any petitions we may have to file.

Rhode Island

Vermont

Virginia

Christopher Recchia
Executive Director

444 N. Capitol St. NW
Suite 638
Washington, DC 20001
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FAX (202) 508-3841
e-mail: ozone@otcinc.org

The 126 petition process envisioned by the Clear Skies Act delays the filing of petitions, reduces the need for EPA to respond in a timely way, enhances an upwind state's ability to delay action based on *planned* air improvements, and creates an economic test that states cannot perform and which is fundamentally imbalanced in its consideration of costs versus benefits. I note that NESCAUM has provided detailed comments on this and other aspects of the legislation. Rather than restating the applicable comments here, OTC expresses its concurrence with NESCAUM's analysis of the Section 126 Petition provisions of the Act.

Jul 08 03 08:58a

Marilyn Stone

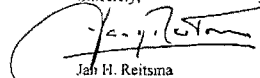
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p. 2

This said, were OTC satisfied that legislation ensured adequate pollution reductions from upwind utilities on a firm timeframe such that our states *could* achieve attainment on schedule, OTC would be willing to consider forbearance of the right to file petitions for a reasonable period of time while those reductions are implemented. We do not believe that the current Clear Skies bill meets that goal or would allow us to measure progress sufficiently to warrant any forbearance. Suspending the states' right to file petitions in the absence of specific scheduled reductions would, in our view, be contrary to the goals of the Clean Air Act. Addressing specific local conditions may also require the use of the 126 petition process. We fully support the notion of improving predictability for industry, but believe that objective is more properly achieved by establishing clear, achievable performance standards for reductions in upwind emissions and sticking to that commitment.

Thank you for the opportunity to comment on this section of H.R. 999. We would welcome the opportunity to present our views directly to your Subcommittee at any time convenient for you. Similarly, we look forward to the opportunity to discuss our views on the overall bill when we have completed our work, expected by the last week of July. Please do not hesitate to contact OTC Executive Director, Christopher Recchia, if we can provide such testimony or be of further assistance on any OTC air quality matter.

Sincerely,


Jan H. Reitsma
Chair

Cc: OTC States
Christopher Recchia

Jul 08 03 08:58a

Marilyn Stone

401-222-4546

p. 3

Congress of the United States
House of Representatives
 Washington, D.C. 20515

JUL 07 2003
 OFFICE OF THE
 DIRECTOR

June 27, 2003

Jan H. Reitsma, Director
 Rhode Island Department of Environmental Management
 235 Promenade Street
 Providence, RI 02908

Dear Mr. Reitsma:

We are writing to you in your capacity as Chair of the Ozone Transport Commission (OTC) to request OTC's views on specific legislative provisions that the House Subcommittee on Energy and Air Quality may soon be considering.


We understand that the OTC is currently formulating its views and recommendations regarding federal multi-pollutant legislation. We look forward to examining OTC's work when it is ready.

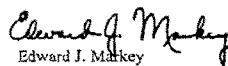
However, today we'd like to request OTC's views on specific provisions contained in H.R. 999, "The Clear Skies Act of 2003." This legislation makes significant changes to section 126 of the Clean Air Act, which provides states with a tool to address sources of pollution in upwind states. Section 126 has been successfully used in the past, and there appears to be no evidence of its abuse. We are concerned about revisions that could prevent its use or make it more difficult to use in the future.

We request your views on these proposed changes and request that you respond by July 7, 2003.

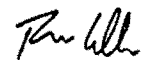
Thank you for your attention to this important issue.

Sincerely,


 Henry J. Waxman
 Member of Congress


 Edward J. Markey
 Member of Congress


 Frank Pallone
 Member of Congress


 Thomas Allen
 Member of Congress

cc: Chris Recchia

Jul 07 03 06:33p

ESI International

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p. 2



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David C. Foerter, *Executive Director*
E-mail: dfoerter@icac.com

Chad S. Whiteman, *Deputy Director*
E-mail: cwhiteman@icac.com

July 7, 2003

Hon. Henry A. Waxman
House of Representatives
2204 Rayburn House Office Building
Washington, DC 20515-0529

Re: Response to Your Letter of July 3, 2003

Dear Representative Waxman:

Thank you for your letter of July 3rd requesting the views of the Institute of Clean Air Companies ("ICAC" or "the Institute") on whether cost-effective technology would be available to achieve the emission reductions and timing specified in H.R. 2042. The Institute is the nonprofit, national association of companies that supply air pollution control and monitoring technology for all types of stationary sources, including coal-fired power plants that are affected by multipollutant legislation, including H.R. 2042. ICAC members supply the complete range of competing control and emissions measuring technologies for emissions of mercury, sulfur dioxide (SO₂) and nitrogen oxide (NO_x), along with all other criteria pollutants and the hazardous air pollutants. Thus ICAC speaks for the entire industry, not just one technology. The Institute's members do not supply technology for CO₂ control and therefore I will not address CO₂ in these comments. For more on ICAC, including on-line access to attachments referenced in these comments, see www.icac.com.

To satisfy your request for comments by July 7th, the Institute's remarks are brief. However, the ICAC is committed to continue to provide additional details or views that would be useful in your deliberations of clean air legislation. You should also be aware that ICAC has previously submitted both oral and written testimony on clean air legislation introduced in Congress (i.e. S. 556 introduced in 2001). Although that testimony was submitted nearly two-years ago, the substance of the testimony remains exceptionally relevant to your current request (Attachment I and II), however, the time frame for implementing these requirements has only grown more favorable with the passage of time.

I. Cost-Effective Technology is Available

Control technologies to reduce SO₂ emissions have been in operation in the United States for over three decades, with dramatic improvements in performance, reliability, and overall cost-effectiveness being made, particularly during the last decade. NO_x controls have been operating in the United States for a relatively shorter time period but have benefited from the relatively overnight success from operating overseas since the 1980's (Germany, Japan, etc.) and transference of that success to the United States in the 1990's. There is no real debate that



reliable, demonstrated in-practice control technology exists to clean coal emissions on the order of 95 percent and greater for SO₂, and 90 percent and greater for reducing NO_x emissions. These technologies have been and will be continually enhanced to ensure control requirements are being achieved. The air pollution control technology industry is extremely competitive in vying for jobs from an increasingly competitive electric utility industry. In turn, the electric utility industry is driven by the certainty of clear regulatory requirements. In fact, study after study show the positive relationship between the existence of regulatory drivers and improvements in control technologies and cost improvements. Simply, the certainty of regulation in this industry is the single greatest incentive for technology innovation and reducing costs.

Through the deployment of cost-effective technologies for the control of NO_x and SO₂, there has been a realization that these technologies have an even greater cost-effectiveness due to their multipollutant benefits. There is no debate that operating with these control technologies will also reward the user by reducing their contributions to acid rain, visibility impairment, PM_{2.5}, and mercury.

II. Industry-Wide Resources are Available

The installation of controls on a significant number of power plants has been undertaken in the past in both the U.S. and abroad. For example, in Germany, flue gas desulfurization (FGD) systems for SO₂ control and selective catalytic reduction (SCR) systems for NO_x control were installed on a large portion of the power industry in a short time frame. Seventy power plants installed FGD controls and 114 plants installed SCR controls during overlapping time periods in the late 1980s. The completion of the installations across the power sector occurred in approximately five years with individual installations occurring within that timeframe and taking between 2-3 years to complete.

Today in the U.S. roughly one-third of the coal-fired generating capacity has or shortly will have operating air pollution control technologies that significantly reduce emissions of NO_x and/or SO₂. Power generators in the northeastern U.S. installed significant numbers of SCR equipment to meet the requirements of the summer time NO_x trading program requirements. As a result, over 100 SCR systems have been installed over the last five years with additional units currently under construction to meet the May 2004 compliance deadline for the NO_x Transport SIP call. Similarly, approximately one-third of the U.S. coal-fired generating capacity currently operates with SO₂ controls. Current estimates are that by the end of 2005, more than 100 Gigawatts (GW) of the more than 300 GW of the U.S. coal-fired electric utility generating capacity will be operating with advanced NO_x controls. The vast majority of the control technology installations, primarily in the eastern U.S. will have been installed within a five to six year period. These technologies already in use are the same technologies, albeit continuously improved upon, that would be used to achieve the NO_x and SO₂ reductions contemplated by H.R. 2042. H.R. 2042 would essentially utilize the demonstrated control technologies and resources over a similar period of time as were recently utilized to satisfy existing NO_x and SO₂ control program requirements.

ICAC estimated that similar multipollutant control legislation (introduced during 2002) would generate more than 300,000 new one-year manufacturing, construction and engineering jobs in the air pollution control industry (Attachment III). Conversely, it should be expected that

lack of regulatory or legislative action in the near future, coupled with a significant period of jobs inactivity, could jeopardize the viability and availability of the active skilled labor work force (i.e. craft and boiler makers) that have been dedicated to air pollution control installations. The better scenario is to define air pollution control markets with regulations and incentives to efficiently utilize the existing work force and attract qualified craft labor into the future.

The introduction of a trading mechanism provides the affected industry with a desired level of compliance flexibility, and potentially the opportunity to improve the cost-effectiveness of control technologies. However, appropriate regulatory incentives and mechanisms need to be enlisted to ensure the even utilization of resources. The greatest challenge will be to provide an appropriate level of flexibility to affected industry (e.g. electric utility industry) while ensuring an efficient deployment of resources. The compliance window in H.R. 2042 offers a timeframe for efficiently utilizing resources, particularly given the similarity to the 5-6 year timeframe for implementing the NO_x Transport SIP call (despite uncertainties in resource issues related to judicial challenges).

III. Mercury Controls are Commercially Available

Despite the lack of any current regulatory drivers requiring the control of mercury from coal-fired electric utilities, commercially available technologies have emerged, innovated and become increasingly cost effective. Currently, combinations of control technologies designed for NO_x and SO₂ control, have had the unintended, albeit positive, consequence of also reducing mercury emissions. In addition, the use of carbon injection has emerged due simply to the potential of an emerging market from regulation and/or legislation. Given that the primary market to date is dedicated to sales related to research, the level of innovation and cost reduction has been significant and tracks well with progress and technology developments with other technology markets that emerged over the past few decades (e.g. SCR development for NO_x control).

In conclusion, cost-effective technologies and the resources are available to implement the control strategies defined by H.R. 2042, with the greatest challenge of providing an appropriate level of compliance flexibility to affected industry while also ensuring an efficient and cost-effective deployment of resources.

Again, thank you for inviting the views of ICAC on this subject. If you have any further questions, please do not hesitate to contact me.

Sincerely,



David C. Foerter

Mr. WAXMAN. So Mr. Holmstead, this is the problem we have in looking at the proposal that is before us. Why is it that we haven't been able to get the analysis? For example, why haven't we been able to get the information about those two items that I requested, the Senator Jeffords bill that we have introduced together and the industry analysis that EPA says they relied on in evaluating the straw proposal and changing it?

Mr. HOLMSTEAD. Let me take the second one first, because in anticipation of the hearing, I sat down with our staff to go over requests that had come in from members of this committee, and I believe what you asked for was information that we have received from industry groups and unions. That was one of the reasons that we revised the straw proposal to the Clear Skies Act. And I can say that we have given you everything that we have, and I think it would be useful just—what we provided you with is I think a copy of every meeting that I had. You know, I meet with dozens of people every week, and we provided you with that, and we also—just so you know, we searched all of my records, my staff searched all of their records. We don't have materials, but what we do have—

Mr. WAXMAN. Let me interrupt you, because I really don't want to know about your meetings. EPA adopted a proposal called a straw proposal. It had deadlines and achievable goals. It would have reduced air pollution, as Mrs. Capps pointed out in her questions to you, and it went to the White House, and the White House changed it and weakened everything into this proposal that we have before us today. And you were asked why that happened, and your response to the press was, well, we did an analysis that industry presented to us showing that our proposal was better. Well, we ask for that analysis.

Mr. HOLMSTEAD. No—

Mr. WAXMAN. Was there no such analysis?

Mr. HOLMSTEAD. No. There is analysis. And essentially what happened, the straw proposal, as I said before, was a proposal to get the discussion started. It is not correct to say that that went to the White House and the White House changed it. We engaged in a number of months of very thoughtful discussions with not just the White House, but the Department of Energy, the Department of Interior. We met with environmental groups. We met with industry groups. We met with union folks. I provided you with a list of all those meetings, but then based on the concerns that people raised, we went and did our own analysis. We didn't rely on an industry analysis, and we have provided that. It is on our Web site. We have a feasibility and sort of an engineering feasibility analysis, and what that told us was that given—

Mr. WAXMAN. But modeling, did you do modeling?

Mr. HOLMSTEAD. I am not sure what kind of modeling we could have—

Mr. WAXMAN. Well, modeling is a basis in which we can see whether we are going to achieve objectives, and you did modeling for your proposal but not the straw proposal.

Mr. HOLMSTEAD. No. We did do modeling for the straw proposal.

Mr. WAXMAN. We haven't been able to—

Mr. HOLMSTEAD. We provided that to you. You have all the modeling we did on the straw proposal.

Mr. WAXMAN. I have to differ with you. It is not in the data. It is not on your Web site. It has not been given to the Congress. These are important to us because——

Mr. HOLMSTEAD. Just to be clear, I mean, I want to be sure, because I feel badly about this. We have provided you on CD ROMs all of the runs that we did, all of the summaries that we did for the straw proposal. You——

Mr. WAXMAN. The straw proposal was not updated the way——

Mr. HOLMSTEAD. No. The straw proposal was not updated. And, again, just to give you a perspective, we have used up our entire budget plus some other funds that we could get from the administrator to go through the most—as I say, the most comprehensive and sophisticated air modeling study ever done.

Now, we——

Mr. WAXMAN. Well, this couldn't have been the most—it couldn't have been that effective and rigorous an evaluation if we haven't been able to get the updates on the models. And you send us a list of your meetings. That doesn't give us the information in which we can evaluate why a proposal that came out of EPA that was considered reasonable and had goals and reasonable timeframes ended up with a proposal that pushed out the timeframes, eliminated most of the requirements under the Clean Air Act to make sure that the goals were actually met and achieves a far greater reduction from the analysis we get from people who don't have the resources of EPA.

But let me have that sitting out there because I don't want to argue with you about it, and maybe you can give us—I want to ask you about a specific provision, because I think it illustrates the point.

If you examine what you do in this proposal on mercury, under the Clean Air Act, EPA has to look at these power plants and make sure they reduce emissions from toxic air pollutants to the maximum degree achievable, taking costs and other factors into account. That was what the Congress adopted into law on a strong bipartisan basis.

Now, my staff was briefed from the White House Council of Economic Advisers, the Energy Information Administration, DOE and EPA, and according to their briefings, both the EPA model and the EIA model assumed that if a plant installs activated carbon and fabric filters, it will get a 90 percent mercury reduction on all coal types.

Do you agree with the EIA and the EPA models that a technology is available to reduce mercury emissions by 90 percent from all types of coal?

Mr. HOLMSTEAD. I don't think we can say categorically from all types of coal. There is a difference between—as you well know, there is a lot of complexity in all of these things. We have good data if you use—if you burn bituminous coal, and you have ACI with a bag house, I think we actually have some commercial—in practice, we can get 90 percent. We have less data. We have some pilot projects on subbituminous. We have even less information on lignite. So I am not quite sure that we are at this point, but we do——

Mr. WAXMAN. Well, the point is that we have a lot of data from a lot of different sources that say you can achieve a 90 percent reduction, but the Clear Skies legislation would repeal this mercury MACT requirement, and it would only aim for a 45 percent reduction in the first phase, and it would only achieve a 69 percent reduction sometime after 2020, and even that is somewhat uncertain. So what we are left with is an existing Clean Air Act that can achieve these reductions that everybody else says would be accomplished, and in its place, a proposal that would, in effect, achieve far less on something as serious as mercury.

Mr. BARTON. Okay. This will have to be the last question in this particular round.

Mr. HOLMSTEAD. I would be happy to—we have been very careful to say a couple of things. We think the most important thing is to look at the reductions that we can get in all these pollutants, and we have tried to do it in a sensible way that gets us very substantial reductions, not only in mercury, but also in SO₂ and NO_x in ways that we couldn't do under the Clean Air Act.

So we think that it is just not very—we think that a better way to look at it environmentally is not to look at one pollutant at a time, but to look at all three.

The other thing is, as you well know, the way we do MACT standards is not quite as simple as what is—I mean, the acronym as you point out is MACT, but the process that under the law we have to go through to determine the MACT involves a much more complicated way of doing it, and in doing that, we have to ensure that no matter how we subcategorize every plant in that subcategory can achieve the MACT standard. And that makes it much more difficult than a cap and trade approach where we can—for instance, we are much more confident in relying on these innovative technologies in a cap and trade approach because of the flexibility, but we don't have the ability under the Clean Air Act to mandate technologies that have been on every plant that have not been proven in practice.

So it is, as you point out, a complicated issue, but what we have tried to do is really look at what we can do with all three pollutants and how we can do that in the most effective way possible.

Mr. BARTON. The gentleman's time has expired.

The gentleman from Maine is recognized for 5 minutes.

Mr. ALLEN. Thank you, Mr. Chairman, and thank you, Mr. Holmstead. I want to continue this conversation, because as I understand your, you know, main point, it says Clear Skies would cut power plant pollution by approximately 70 percent, lower costs with more certainty and faster over the next decade within the current Clean Air Act.

Well, as I understand it, I want to talk about mercury. It is a big issue. It is the area where it seems to me we are going backward the fastest under the proposed Clear Skies, and it is a big deal to me. I mean, 6 years ago the Portland newspapers ran a multi-day story on the dangers of mercury. Well, 6 years later, and we are sitting here talking about giving coal-fired power plants even more time, and it doesn't make a lot of sense to me.

When you talk about benefits, the benefits under Clear Skies, or how much it cuts pollution, the obvious question is compared to what, and the “what” is not evident.

Let me direct your attention just to mercury. Back in—as I said in my opening, back in December 2001, EPA told the Edison Electric Institute that the Clean Air Act’s MACT standard could reduce power plants’ mercury emissions by 98 percent from 48 tons to 5 tons nationwide by 2008. From all that we have read, you know, straight out of the American Coal Council, the technology is available, and you mentioned activated carbon insertion and some sort of fabric filters being the way to go.

If you do that, you get very quickly to much more significant reductions than you are proposing in Clear Skies. So here is the question: I think it is simple. Isn’t it true that if you adopted MACT standards for mercury and abided by them in accordance with the settlement agreement that requires you to propose MACT standards by December 15 and implement them by—or make them final by 2004, December 15, 2004, isn’t it clear that you would get a greater reduction in mercury if you did that than if you implemented Clear Skies?

Mr. HOLMSTEAD. Even if you are looking just at mercury alone—

Mr. ALLEN. I am just looking at mercury.

Mr. HOLMSTEAD. Which, again, I think is not—I mean, given all the other issues—but let’s just put those aside, but I really hope you will look at all three—

Mr. ALLEN. In time, but today it is just mercury.

Mr. HOLMSTEAD. No. I know, but even looking at mercury, that is not necessarily clear, and let me tell you why. We are spending a lot of time trying to figure out what we can justify under the existing law, because at some point, we have to look—we have to do something called the MACT floor, and that as—as I said before, that involves looking at different types of categories, because everyone agrees that an oil-fired plant is different from a coal-fired plant and that a lignite plant is different from a subbituminous plant. Once we do that, we have to look at the data that we have, and we have to array it from best performing to worst performing. We go through that whole process. Then we propose a rule. We take public comment. We have a hearing. We do a final—

Mr. ALLEN. Mr. Holmstead, let me interrupt. I understand the process is complicated. That isn’t my question. My question is about the outcome, just the outcome. Isn’t it, in fact, the case that abiding by a MACT standard would lead to lower reductions in mercury than Clear Skies by, pick a date, 2010?

Mr. HOLMSTEAD. Not necessarily. And again that is part of my point. We go through this process, and then we go through litigation. We will not know either the levels or the timing until we go through a regulatory process, until we have final litigation and dates in place. In contrast, under Clear Skies, we start getting mercury reductions almost right away. We don’t wait until 2008 or 2009. So you get the early mercury reductions before you would get them under MACT.

Mr. ALLEN. But you would have to admit that under Clear Skies, the incentive to comply, the incentive to develop newer technology is less than it would be under a tougher standard.

Mr. HOLMSTEAD. No, the incentive is greater further in the future. And that is one of the—several people have talked about this issue of the cobenefits. We really—from purely an environmental standpoint, it is probably overall most important to focus on these technologies that get all three controls. So you do scrubbers, you also get mercury controls. In the out years, you clearly get more innovation under Clear Skies than you would under MACT. There is no doubt about that. So with something like this, this place, just given the incentives it creates, you are likely to have better technology in the future and you also have a cap in place.

Mr. ALLEN. I understand the appeal of the cap-and-trade system. I am not trying to argue with you about that. What I am trying to suggest is that mercury is the most challenging pollutant to deal with. And by weakening the standards, by allowing more time and more pollutants, more pollution, a higher total amount of pollution, it seems to me pretty clear you are going to get more pollution for the foreseeable future than you are if—than you are if you—than if you don't.

Mr. HOLMSTEAD. I just have to disagree—having lived through the regulatory process now for many years, anyone who tells you what the maximum standard is going to be, I would look at them with a skeptical eye.

Mr. ALLEN. One final question. Have you done the modeling to develop the MACT standard?

Mr. HOLMSTEAD. In developing a MACT standard?

Mr. ALLEN. That is just my question. Have you done the modeling to do the MACT standard?

Mr. HOLMSTEAD. We are doing all the analysis that we need to do to propose a MACT standard, to do a proposal on time by December 15. So we are on track to do everything we need to do to get—including the evaluation of options—to get the MACT standard out.

Mr. ALLEN. As a legislature, can you appreciate how helpful it would be to us to have the modeling before this bill gets marked up, the Clear Skies bill gets up, so we have something to compare it with.

Mr. HOLMSTEAD. I certainly can understand that. But, again, part of my point is until we go through this process that—understandably, you don't want me to go through all the details—we can't tell with you any certainty either what the level is going to be, what the timing is going to be.

Mr. BARTON. This will have to be the last question.

Mr. ALLEN. If I can make just one comment, all I am saying is if you did, you did the MACT modeling for mercury before Clear Skies comes up, we would have something to compare your proposal—

Mr. HOLMSTEAD. I understand. Yes I do.

Mr. BARTON. The gentleman from Ohio, Mr. Strickland is recognized for 5 minutes.

Mr. STRICKLAND. Thank you, Mr. Chairman.

Mr. Holmstead, I have heard from some the local officials and community leaders in my district, which borders the Ohio River, eastern and southern Ohio, right in the midst of coal country, where we have lots of power plants and chemical plants and some steel factories still exist. They are concerned about the area being notified that it will fall into nonattainment under EPA's 8-hour ozone standard. If we do not pass Clear Skies or some other clean air legislation, can you share with me the process that local communities and States may face regarding ozone and particulate matter under current law? In other words, once an area is designated as nonattainment for ozone, what is expected of the area, what are—and this is your opinion—are the economic consequences? Some of my communities have the understanding that no new emissions would be permitted without some offsets. Thus, how would a community like Lawrence County, Ohio attract business, create jobs and the like?

Mr. HOLMSTEAD. That is one of the issues that we are trying to address, obviously, with this legislation. But I understand your question as what happens. We certainly do everything that we can within the existing Clean Air Act to minimize the economic disruption. But under—by statute and now by court order, we have to do official nonattainment designations by April of next year for ozone, probably by the end of next year for $PM_{2.5}$. Once we do those formal designations, that kicks in a whole bunch of things. For instance, there are requirements on no new major source could come into the area without offsetting emissions from somewhere else. So there is that burden. In addition, the State needs to go through, or the local area needs to go through, a process of developing something called the State Implementation Plan to regulate the sources within the jurisdiction, to try to get them down.

And one of the things that we have collectively as an agency discovered in the last few years is we can avoid the need to do a lot of those things if we can just get those dramatic reductions throughout the whole region. So we think that is—we know that is more effective environmentally. We believe it is less disruptive economically. And so that is one of the reasons why we have the sense of urgency about trying to get something done.

Mr. STRICKLAND. I want to thank you for your answer, but I have to tell you, it is not terribly comforting to me. Because I serve in an area where one of my fairly significant towns has an unemployment rate of 18.2 percent. It is not uncommon for several of my counties to have double digit unemployment. And if such a community then is found to be a nonattainment area, I don't know what they are to do. I think the economic consequences could be devastating.

Do you have an answer for me? Do you have an answer for my communities?

Mr. HOLMSTEAD. The real answer is Clear Skies, which gets us which avoids those problems, which gets cleaner air to your communities without that kind of economic disruption. If we have to proceed under current law, our hands are largely tied. We will do everything we can to make sure the implementation is fair and effective, but I can tell you that almost any decision that we make in our office, we are subject to litigation. And that largely ties our

hands. So we, again, we hope that you and others will work with us to pass legislation that can protect the environment, do it in a more effective way, and also avoid these sorts of economic disruptions.

Mr. STRICKLAND. I can tell you, from my point of view, this could be devastating, absolutely devastating to multiple communities in my district, and I assume throughout Ohio and across the country.

One other question, quickly, under Clear Skies, you have 2018 as the goal for achieving Phase 2 reductions for mercury. I wonder if you can explain to me how you arrived at 2018 for reductions down to 15 tons? Is there a way you can explain having achieved that date and that level of reduction?

Mr. HOLMSTEAD. We did a significant amount of modeling which helped us a fair amount with the levels. In terms of the timing, we are much more dependent on studies of economic feasibility, studies of financial feasibility. I can't say that there is anything magic about 2018, other than that seemed to strike the right balance between the cost imposed on this sector and the need to get those reductions. So at some point, the first phase really is very aggressive and our feasibility studies suggest that 2 would be very, very costly to go much farther on the first phase. The second phase, it is much more of a balancing act and trying in trying to determine how quickly new technologies will develop. And that is the way we went about it after a lot of discussion within the administration.

Mr. BARTON. The gentleman's time has expired on the first round. The gentleman from Massachusetts is recognized for 5 minutes.

Mr. MARKEY. Thank you, Mr. Chairman.

Mr. Holmstead, people put on their seat belts, they want their family member to put on their seat belts to protect themselves, not against themselves because in most instances people drive safely, but protect themselves against other drivers on the road who may be more of a risk to your family. That is what Section 126 of the Clean Air Act is. It is a State regulatory seat belt. It allows a State who believes another State is polluting them to go to the EPA in order to get relief.

So I have a few questions for you about what your new proposal does. Under the Clean Air Act now, Mr. Holmstead, isn't it true that Massachusetts can petition the EPA to examine the impact of pollution any time? Yes or no?

Mr. HOLMSTEAD. That is largely yes, I believe. It is not that easy, but they do have that ability.

Mr. MARKEY. They have the right. Isn't it true that EPA has 60 days to respond to Massachusetts?

Mr. HOLMSTEAD. That is what the statute says, yes.

Mr. MARKEY. That is all you have. Isn't it true that if an out-of-state polluter is found to be causing problems that they have between 3 months and 3 years then to fix the problem?

Mr. HOLMSTEAD. Again—

Mr. MARKEY. Is that what the statute says?

Mr. HOLMSTEAD. None of those things have ever been achieved in practice.

Mr. MARKEY. Is that what the statute says?

Mr. HOLMSTEAD. That is what the statute says.

Mr. MARKEY. Isn't it true that the courts have upheld Section 126, the States rights, the State seat belt protection?

Mr. HOLMSTEAD. That is correct.

Mr. MARKEY. So under current law, isn't it true that Massachusetts could petition the EPA about pollution from Pennsylvania tomorrow, have a judgment from the EPA by September, 60 days, and if there is a problem, have it fixed by the latest 2006? Is that what the statute says?

Mr. HOLMSTEAD. That is not the way the statute works.

Mr. MARKEY. Is that what the statute says?

Mr. HOLMSTEAD. That is what the statute says.

Mr. MARKEY. All right. Now, let's turn to the administration's Clear Skies proposal. Under the existing law, if Massachusetts petitioned today, they would get a judgment in September 2003, and it would have to be fixed by 2006. Now, under your scheme, under the Bush Administration's scheme, Massachusetts can still petition the EPA about out-of-state pollution at any time, but EPA would not have to respond before January 1, 2009. Is that correct?

Mr. HOLMSTEAD. That is correct.

Mr. MARKEY. Okay. Now, isn't it also true that if there is a problem, that the State would not have to implement a solution until January 1, 2012, Pennsylvania would not have to actually provide a solution until 2012?

Mr. HOLMSTEAD. This—

Mr. MARKEY. At the earliest?

Mr. HOLMSTEAD. This is an issue that we have looked at extensively. Even if Massachusetts submitted 2 years ago—

Mr. MARKEY. I am talking about under your statute.

Mr. HOLMSTEAD. That is what I am talking about.

Mr. MARKEY. Does Pennsylvania have until January 1, 2012 to provide the relief for Massachusetts from a complaint that it filed tomorrow against Pennsylvania?

Mr. HOLMSTEAD. No, because all that pollution would have been eliminated already.

Mr. MARKEY. Oh, under your bill. I see.

Mr. HOLMSTEAD. Yes.

Mr. MARKEY. So even if Massachusetts says a year into your proposal this thing isn't working, we have more pollution than we have ever had under your statute, they have to wait until January 1, 2012 because that will be the statute, that will be the way it works, in order to get relief. Is that correct?

Mr. HOLMSTEAD. Mr. Markey, I can—

Mr. MARKEY. If it doesn't work, you have a seat belt, you put on your seat belt, Mr. Holmstead, in order to protect—

Mr. BARTON. You need to give the witness an opportunity to at least answer the question.

Mr. MARKEY. I am just asking him is 2012 the earliest that Massachusetts could gain relief under the statute as you want it to be written.

Mr. HOLMSTEAD. Right. And here is my answer, if you let me give it. I can guarantee you that the State of Massachusetts will have cleaner air—

Mr. MARKEY. You can't guarantee me.

Mr. HOLMSTEAD. I can.

Mr. MARKEY. No, you can't. You can't guarantee me that an out-of-state polluter is not going to continue on their path. You can't guarantee me that. I need relief in the States.

Mr. HOLMSTEAD. That is what I am trying to provide you.

Mr. MARKEY. No, you are not. You say until 2012, I can't get an answer in Massachusetts. You are telling me your theoretical software model is going to work Mr. Holmstead. I can do away with all the States rights, you are on your own Massachusetts, Maine, Connecticut, good luck. Wait until January 1, 2012.

Mr. HOLMSTEAD. Mr. Markey, Massachusetts only can use Section 126 if they have nonattainment areas. All of our analysis shows that there are no more nonattainment areas by 2010.

Mr. MARKEY. I want to retain the right to bring an action in order to protect myself in case something goes wrong with an out-of-control driving under the influence of dirty coal plants out in the Midwest kind of slips out of your control. Okay? During the old coal plants which doesn't—

Mr. HOLMSTEAD. Our track record is pretty good. There is not a single one.

Mr. MARKEY. I need my seatbelts. You are taking my seatbelt, and the health and safety of the people in the eastern part of the United States.

Mr. HOLMSTEAD. I am giving you air bags all the way around your car.

Mr. MARKEY. You are giving me—

Mr. HOLMSTEAD. We are going to give you cleaner air.

Mr. MARKEY. You are giving me a software system. I want a seatbelt. And I don't trust your dependence upon the NASDAQ to—

Mr. BARTON. The District Attorney's time has expired. So we are going to start the second round of questions now. The chairman will recognize himself for the second round of 5-minute questions.

Mr. Holmstead, you attempted to convey to Mr. Markey that what the law says is not necessarily the way it is actually implemented. As I read this particular section, on nonattainment, there actually has to be a finding that it would contribute significantly to nonattainment before that association of the law could be implemented. If I heard you correctly, you said in Massachusetts that you don't think, that it is your understanding that data shows there are no significant nonattainment areas in Massachusetts; is that not correct?

Mr. HOLMSTEAD. There wouldn't be under Clear Skies. Absent Clear Skies, there clearly are some nonattainment areas.

Mr. BARTON. Mr. Burr has just arrived. The chairman is going to suspend the start of the second round of questions to give him an opportunity to ask the first 5 minutes if he wishes.

Mr. BURR. I thank the Chair and indulgence of my colleagues.

Mr. BARTON. Mr. Burr is recognized.

Mr. BURR. I thank you. And my apologies that I didn't stay to listen to the other questions. I am sure they were all very very good. I will try make sure that—

Mr. HOLMSTEAD. Some were better than others, but they were all very good.

Mr. BURR. Ed, were you out of control?

Mr. BARTON. Mr. Markey was not out of control. He was just intense.

Mr. MARKEY. I was wearing a seatbelt.

Mr. BURR. Mr. Holmstead, as you are aware, North Carolina took action on the issue of making our air cleaner in 2002 by enacting the Clean Smoke Stacks Legislation. This law requires our State's 14 largest coal-fired power plants to reduce emissions on NO_x by 78 percent by 2009, requires reductions of SO_x in 2009 and again in 2013, that will result in 74 percent overall reduction. The new control technologies will also reduce mercury emissions. One crucial element of our smoke stacks laws is the ability to use available means, including ones found in Section 126 of the Clean Air Act to pursue pollution reductions from upwind sources, mainly from other States, that might not have a pollution reduction schedule comparable to the one set in our State under the new law. The proposed Clean Skies Legislation, however, would prevent the EPA from making any findings under 126 petition prior to 2009 and prevent any implementation action under 126 petition prior to 2012.

My questions: My primary concern is that the Clean Skies Legislation will not in any way undermine the existing authority of States to clean up air pollution. Can you commit that Clean Skies Legislation, if passed, will not undermine the authority of the States?

Mr. HOLMSTEAD. What I can commit to is that Clear Skies will solve the out-of-state pollution problem that North Carolina has much more effectively than the current law. And, again, we have been—we are certainly very aware and following very closely the efforts of North Carolina. We commend the State at getting reductions that are actually very similar to the Clear Skies Act, but our modeling shows that even with that, North Carolina, even with that law, there are counties that don't meet Federal air quality standards. However, with Clear Skies in addition to your law, there are no longer any remaining—I don't even think there are any very close to the line. I think we get such significant—we are talking about 70 percent reductions, the bulk of those coming in the first 6 or 7 years so that North Carolina—so under current law, once you are in attainment, you have no ability to petition any upwind States. So the problem would be solved—one of the things that I have told people that even if North Carolina and Massachusetts and every other State along the Eastern Seaboard submitted 126 petitions tomorrow, we couldn't get any better reductions than you will get under Clear Skies. And that will solve North Carolina's nonattainment problem.

Mr. BURR. But do you agree that the tools, the means that we have with the extension or the delay in our ability to use a petition under 126, that we have eliminated some of the tools that we have got to meet our attainment goals, voluntary goals.

Mr. HOLMSTEAD. I don't think that is an accurate—effectively, what we are doing is we are granting your 126 petition right now. If you pass this legislation, that will give you far greater reductions than you would get under 126. Once you come into attainment, which you absolutely would do in North Carolina, you would no longer have any rights under 126 anyway. So, you know, it is a hard way, but what you are doing is, legislatively, effectively grant-

ing a 126 petition not only from North Carolina but for States throughout the Southeast and the mid-Atlantic and Northeast.

Mr. BURR. Section 116 of the Clean Air Act mandates that States have the ability to mandate reductions in specific geographic areas and specific sites in order to protect public health. Yet there is some concern that Section 116 might be amended so as to take away this right. In a May 2003 letter from Governor Whitman to North Carolina Governor, Mike Easley, the EPA Administrator noted, to avoid any possible confusion on this matter, Clean Skies adds several sections. Section 116, reiterating that States have the right to impose more stringent requirements on power plants. Can you elaborate on these additions? And when you say more stringent controls on these power plants, does this mean stationary sources in one's own State or upwind areas outside of a State's border?

Mr. HOLMSTEAD. A State under the current Clean Air Act has jurisdiction over all the sources within its State borders. It has no jurisdiction over upwind States. So what we have done is to clarify that absolutely nothing in Clear Skies changes that jurisdiction. So North Carolina or any other State would absolutely—there is no preemption here that would absolutely retain jurisdiction to do anything more stringent than wouldn't be required under Clear Skies.

Mr. BURR. But again tied to the border of their State.

Mr. HOLMSTEAD. That is the way the act works now.

Mr. BURR. I thank the chairman. I yield back the balance of my time.

Mr. BARTON. The Chair now recognizes himself.

Mr. BURR. Could I ask unanimous consent to enter the Secretary's letter and the Governor's letter into the record for the purposes of that last question?

Mr. BARTON. Yes. We will show it to the minority and if the minority approves, without objection. Also, take this point, Mr. Waxman submitted several documents for submission into the record. The Chair has reviewed them. We will accept the letters that were presented, but the material from the newspaper articles is fairly lengthy. We will put that in the committee files but not put it in the actual transcript of the hearing.

[The material follows:]

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MICHAEL F. EARLEY
GOVERNOR

April 15, 2003

The Honorable Christine Todd Whitman
Administrator, U.S. Environmental Protection Agency
3000 Ariel Rios Federal Building
1200 Pennsylvania Avenue, N.W.
Washington DC 20460

Dear Administrator Whitman:

Thank you for the invitation to participate in a conference call with other southern governors to discuss EPA's proposed Clear Skies legislation. Since I will be unable to join the call, I would like to share with you my concerns about the impact of this proposed legislation on air quality in North Carolina.

In 2002, North Carolina took strong action to clear our air. Our Clean Smokestacks Act requires the fourteen largest coal-fired power plants in the State to reduce emissions of nitrogen oxides (NOx) by 78 percent by 2009. It also requires significant reductions in sulfur dioxide (SO2) by 2009 and further reductions by 2013, totaling a 74 percent SO2 reduction overall. The control technologies mandated by these restrictions will also reduce mercury emissions. Projected pollution reductions through Clear Skies legislation are similar to those required by the Clean Smokestacks Act. However, the Clear Skies legislation would take twice as long to achieve these reductions, which would not be completed until the year 2020. The owners of the facilities subject to Clean Smokestacks have assured the State that the required reductions can be achieved by the statutory deadlines. In fact, these entities supported the Clean Smokestacks Act.

In order for Clear Skies legislation to have value for North Carolina citizens, it must ensure pollution reductions from our neighbors. Through Clean Smokestacks, North Carolina has done its part to improve the quality of its air. We have gone beyond what is required by federal law. But we cannot go it alone. Pollution from neighboring States may still threaten the health, the environment, and the scenic beauty of our State. Poor air quality in western North Carolina is responsible for increased respiratory problems of children and the elderly there, and already has impacted tourism and the economy of that region.



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The Honorable Christine Todd Whitman
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 April 15, 2003

Each state must have some recourse in the event that upwind states and facilities fail to accept fair responsibility for downwind impacts. Although the cap-and-trade remedy under Clear Skies may achieve reductions on a national scale, it may also provide no relief at all in locations where paper credits are used in lieu of real controls. EPA's website cautions that its model "is subject to a number of uncertainties, particularly when projecting air quality or environmental impacts in particular locations." Yet, the Clear Skies legislation, as currently proposed, would severely restrict the states' ability to seek pollution reductions from upwind sources in other states through sections 126 and 110(a) of the Clean Air Act. The federal courts have in the past few years broadly upheld EPA's authority to provide states relief from interstate transport of pollutants under these sections of the Clean Air Act. The proposed statute severely restricts and delays the availability of these tools to remedy interstate transport.

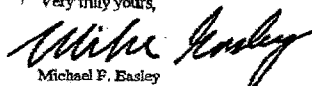
North Carolina has demonstrated that States can successfully exercise their right to impose more stringent controls than federal law requires. States must retain the ability to mandate reductions in specific geographic regions and at specific sites in order to protect the public health and welfare. Section 116 of the Clean Air Act currently provides this right, and it should be expressly saved.

In short, please ensure that federal legislation explicitly preserves the rights of the states to take stronger action to protect the air than the federal government and that it does not in any way weaken our current ability to prevent other states from exporting high levels of air pollution into North Carolina.

Thank you for the opportunity to share my concerns regarding the proposed Clear Skies legislation. I appreciate the opportunity to work with you and southern governors to develop strong, national multi-pollutant legislation.

With kindest regards, I remain

Very truly yours,



Michael P. Basley

MFE: rht

cc: Southern Governors' Association Governors
 North Carolina Congressional Delegation
 Jeffrey Holmstead, EPA Assistant Administrator for Air and Radiation
 Jimmy Palmer, EPA Regional Administrator for Region IV
 Bill Beaker, Executive Director, STAPPA/ALAPCO
 Elizabeth Schneider, Southern Governors Association

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 30 2003

THE ADMINISTRATOR

The Honorable Michael F. Easley
Governor
State of North Carolina
20301 Mail Service Center
Raleigh, North Carolina 27699-0301

Dear Governor Easley:

Thank you for your letter of April 15, 2003, in which you shared your concerns about the impact on North Carolina's air quality of the Administration's proposed Clear Skies Act.

First and foremost, I would like to commend your leadership in adopting the Clean Smokestacks Act. The Clean Smokestacks Act is quite an achievement and will provide many health and environmental benefits to North Carolina. Clear Skies would do for the nation what the Clean Smokestacks Act will do for North Carolina — use a market-based approach to improve air quality and public health by significantly reducing power plant emissions in a cost-effective manner.

Clear Skies will do far more to reduce air pollution caused by power plants over the next decade than would the current Clean Air Act, including the provisions to address interstate transport of pollution in Sections 110 and 126. The analysis we did last year projected that, under Clear Skies, power plants would emit 35 million fewer tons of SO₂ and NO_x over the next decade than they would under the current Act. Under Clear Skies, the Southeast would see emissions of SO₂, NO_x, and mercury reduced by almost 80% by 2020 when compared to 2000 levels, with \$10 in health and environmental benefits for every \$1 invested (based on 2002 analysis).

I understand your concerns about ensuring that upwind states and facilities accept responsibility for downwind impacts of their emissions. I agree that this country needs to reduce power plant emissions nationally to address the transport of pollution from one state to the next, and that we need to do so in a cost-effective way. Those concerns are what motivated the development of the Clear Skies Act.

Let me clarify what Clear Skies would achieve for States and why we believe the accompanying changes to Section 126 are appropriate. Most importantly, Clear Skies would provide substantially greater reductions over the next decade than could be achieved under Section 126. Unlike Section 126, we do not expect litigation-related delays under Clear Skies and therefore the cumulative amount of these reductions through 2012 would not only be greater but their timing would be much more certain. Our analyses of the feasibility of achieving the Clear Skies reductions for the three pollutants suggest we are pushing the electric power industry about as far as we think is feasible.

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for the first phase of Clear Skies. Granting reductions for 126 petitions during this period would only create uncertainties and could well delay implementation of predicted controls. Given these practical considerations and the massive reductions expected from the phase I programs, under Clear Skies, EPA could not grant section 126 petitions until 2009, and could not require emission reductions from the section 126 process until 2012. Essentially, Clear Skies is saving states the trouble and expense of going through the 126 process to get emission reductions prior to 2012, but providing greater environmental benefits during that time period than otherwise could be provided.

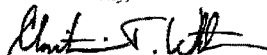
Furthermore, Clear Skies is designed to reduce emissions by significant amounts over large geographic areas, and will improve air quality in every part of the country where power plants contribute significantly to air pollution. While the level of emissions control will vary somewhat from plant to plant, emission levels will be substantially lower under Clear Skies. Eight years of experience with the cap and trade mechanism under the Acid Rain Program has clearly demonstrated that a market-based program can achieve substantial emissions reductions and significantly and efficiently improve air quality. In addition, independent analyses by the Environmental Law Institute, Environmental Defense Fund, and Resources for the Future all conclude that trading under the Acid Rain Program has not resulted in geographic emissions shifting or local air quality concerns. In fact, trading has led many of the largest polluters to clean up the most and to reduce emissions significantly earlier than they would have. The more stringent caps established under Clear Skies will build on this track record of success.

I certainly agree with you that it is very important that each state retain the authority to impose more stringent controls on its own sources, as North Carolina has done in the Clean Smokestacks Act. As a former Governor, I understand the importance of not interfering with a state's right to control its own stationary sources. Clear Skies would not change section 116 of the Clean Air Act, which generally allows states to adopt standards or other measures more stringent than federal law. To avoid any possible confusion on this matter, Clear Skies adds several sections reiterating that states have the right to impose more stringent requirements on power plants.

In summary, the Administration's proposed Clear Skies Act embodies the belief that significant environmental progress can be made while the economy continues to grow. If legislation is not passed this year, however, governors and state regulators may be forced to seek clean air emission reductions from other sources that could pose significant economic and political challenges. Your support and continued interest for national multi-pollutant legislation are critical to this legislative process.

Again, thank you for your letter. Please feel free to contact me if you have any further questions or have your staff call Dona DeLeon, Deputy Associate Administrator for Intergovernmental Relations, at (202) 564-5200.

Sincerely,



Christine Todd Whitman

Mr. BARTON. The Chair recognizes himself for 5 minutes. I had already basically asked the question under the current law if there is really not significant nonattainment then the States don't have the right that Mr. Markey was referring to; is that correct?

Mr. HOLMSTEAD. That is absolutely correct. So a State that has no ability whatsoever to file a 126 petition if it doesn't have nonattainment areas? And if it is not—it has to be projected to have future nonattainment areas. Even if it does have a nonattainment area, there has to be a showing that an out-of-state source or group of sources contributes significantly to the nonattainment problem in that State.

Mr. BARTON. Isn't it also correct that this particular chart that we put up that shows all the various milestones under the current Clean Air Act, even in this chart the disclaimer at the bottom is: In developing the time line of current and Clean Air Act requirements, it is necessary for EPA to make assumptions about rulemakings that have not been completed or in some cases not even started. EPA's rulemakings will be conducted to the usual notice and comment process and the conclusions may vary from these assumptions.

So, in point of fact, under the Clean Air Act, you can have all the statutory language that you want, but there are numerous, numerous examples of statutory requirements under the current Clean Air Act that have never been met; isn't that correct?

Mr. HOLMSTEAD. That is correct.

Mr. BARTON. In fact, one of the few things that actually has worked better than expected was a cap-and-trade provision for SO₂. That has worked more quicker and more cost-effectively than anybody thought at the time we passed it. You have a chart that showed that in terms of the cost.

Mr. HOLMSTEAD. That is also correct.

Mr. BARTON. So it would be logical to assume that if we went to a cap-and-trade program for NO_x, SO_x and mercury for the first time, if history is a teacher, that kind of a flexible program with specific targets but given the market the opportunity to meet those targets, in whichever way they felt most appropriate, might actually work better than expected too, at least that is a logical conclusion.

Mr. HOLMSTEAD. Yeah, we are confident in the projections that we have made, but markets and technology tends to improve in unexpected ways when you let them.

Mr. BARTON. Well, I do want to share some of Mr. Markey's skepticism about EPA models. I have found in my time that some times the EPA can't even model the past correctly, much less the future. So I have a healthy skepticism there also.

I want to get back to the mercury issue that Mr. Strickland has raised and Mr. Boucher has raised. The 26-ton Phase 1 target for mercury under the pending bill, it is my understanding when you ran the EPA model on NO_x and SO_x, it showed that you would get a cobenefit reduction from 48 tons to 26 tons, so that is where the standard was set; is that not correct.

Mr. HOLMSTEAD. Actually, that is not quite correct.

Mr. BARTON. Okay.

Mr. HOLMSTEAD. We knew even in the first year we did modeling that that 26-ton cap was more than pure cobenefits. And what we had tried to—

Mr. BARTON. How much more?

Mr. HOLMSTEAD. Probably at least three tons. We thought at that point that cobenefits was around 29 or 30 tons, and the cap was set at 26.

Mr. BARTON. But the basic assumption was, we are going to put this cap-and-trade standard in for NO_x and SO₂ which we have a history of and we are going to get some cobenefit, and we are going to take that reduction of cobenefit, make that the target for Phase 1 for mercury, and according to what you just said, make it a little bit tighter.

Mr. HOLMSTEAD. That is correct.

Mr. BARTON. Now, you have got new modeling, and you have briefed, you have had this program researched by other interested parties out in the affected community, and so the testimony in the Senate and other places is now, well, there really won't be as much of a cobenefit. So we are going to further that a little bit, we are going to back away from saying you get a cobenefit, but we are not going to back away from the 26-ton target. If Mr. Boucher and myself and others decide to legislate and buy the argument that there is a cobenefit, it is logical that we would set that cap, that Phase 1 target, at where that cobenefit is. And maybe further it a little bit. But, if 26 tons is just the result of a manipulation or a modeling and the other two, the other two pollutants, it is reasonable to assume that we have got new modeling on mercury. We can set the Phase 1 target for mercury where that new modeling says it ought to be based on a cobenefit reduction. That is at least logical.

Mr. HOLMSTEAD. I certainly understand that point of view.

Mr. BARTON. Okay. That is good enough for now. The Chair would recognize Mr. Boucher for 5 minutes.

Mr. BOUCHER. Thank you very much, Mr. Chairman. We have no objection to the entry into the record of the material that Representative Burr submitted.

Mr. BARTON. Without objection.

Mr. BOUCHER. Mr. Holmstead, I want to pursue a parochial topic with you in this time that I have. And it relates to your predictions of coal production by the year 2020 under the Clear Skies Initiative. Your overall reduction is that there will not be any substantial decrease in coal production as a consequence of enactment of the bill, but that production varies by region. It also varies by coal type. You have different predicted production levels based upon those variations. For example, you suggest that Western low sulfur coal will not fare as well as coal generally would fare. You also predict that what you call interior coal, and this is coal from the central portion of the U.S., that is predominantly high sulfur coal, will fare better than the norm. And that favorable performance for the interior coal tends to drive the overall prediction up to the point that you say no substantial overall effect.

With regard to the Appalachian region you are predicting essentially flat production so no basic effect from Clear Skies on Appalachian coal. But within the Appalachian region we have two different kinds of coal. We have low sulfur coal found in southern

West Virginia and in my district in the western part of Virginia, there is high sulfur coal found in the northern part of West Virginia, in Pennsylvania and adjoining regions. And I am just wondering if your analysis takes you to an examination of the effect of the bill by 2020 on these two different kinds of coal within the Appalachian region. Your gross calculation is no overall effect with regard to Appalachian to coal, but I am primarily interested there what your study would show with regard to the effect on low sulfur coal which is what we have in my area. Do you happen to have that prediction?

Mr. HOLMSTEAD. I don't have it here with me, but we can provide it. Our modeling isn't detailed enough that we can tease that out of the model. Just if I could note two quick things that I think will be reassuring to you. Our modeling suggests that in the Appalachian region, coal production does go up not nearly as much as it does in the interior but does go up at least modestly. The thing that really drives the fact that—and certainly production stays flat in the west. The reason I believe that we see that is because we see scrubbers coming into virtually all of the major plants throughout the country, especially in the Midwest and the East. Once those scrubbers are in place, it becomes logical for most of those plants to go ahead and buy coal locally rather than incur the transportation cost to get it from Wyoming. So there is no incentive to switch away from low sulfur coal, especially if it is produced locally. There is still a benefit. If you scrub low sulfur coal, you get fewer reductions than scrubbing high sulfur coal. So I don't think we would expect any significant change, but we can provide that data to you in the next—my staff says soon.

Mr. BOUCHER. Soon is fine. I would appreciate your providing it. What gives rise to my concern, specifically, is your prediction that low sulfur coal in the West will not fare well, the higher-sulfur coal found in the interior will fare very well. And an extrapolation from that subject is that low sulfur coal in the East is going to fare about the same way that low sulfur coal in the West does, which is not very well. By your explanation, what drives your analysis is the reality of the installation of scrubbers presumably to meet some of the standards under the Clear Skies legislation that the incentive then is to buy high sulfur coal if that is what you have locally.

Mr. HOLMSTEAD. Whatever you have locally.

Mr. BOUCHER. Whatever you have locally. Of course, a lot of the plants that are using Appalachian low sulfur coal today happen to be situated in the Ohio valley. They buy the low sulfur coal because it is compliant under existing law. So I am concerned. I would very much like to see the results of that analysis. I appreciate your making that available.

Mr. HOLMSTEAD. We will provide those. The other thing we hope people keep in mind is the real comparison here should be between what happens under Clear Skies and what happens under the existing Clean Air Act.

Mr. BOUCHER. That is correct.

Mr. HOLMSTEAD. I think our view is under the existing Clean Air Act, coal would actually fare worse because of—I would be happy to provide more detail on that.

Mr. BOUCHER. That comparison would be very helpful. So break it out high versus low sulfur in the Appalachian region and then under Clear Skies as compared to under current law.

Thank you, Mr. Chairman.

Mr. BARTON. The gentlelady from California is recognized for 5 minutes.

Mrs. CAPPS. Thank you. Mr. Holmstead, I want to ask you please to give me a yes or no answer, and I will give you more time to respond later, but I want to establish something. Using the model established for the so-called Clear Skies Act, have you remodeled the straw proposal?

Mr. HOLMSTEAD. No.

Mrs. CAPPS. Okay. I am concerned about this. And I am concerned that we need to see whether as we are contemplating what you call a major change in the EPA in the Environmental Protection Act, Clean Air Act, we need to see whether there are significant health benefits and to see about this balance between the benefits and the costs. And I wonder how we would be asked to make a judgment if there is no comparison, not just with the underlying Clean Air Act, but have you modeled what the costs and benefits would be, for example, of an additional 10 percent onto the baseline or 20 percent or 40 percent reduction beyond the level that is you chose in your bill?

Mr. HOLMSTEAD. We can—as I indicated before, it would not be possible for us to do the kind of comprehensive modeling of every proposal, but we can extrapolate from what we have done to other things. With regard to the straw proposal, I would just like to caution you that we—again, this analysis is available on our Website—we believe that the timetables in the straw proposal are simply not feasible largely because of the investment that is already required under the NO_x SIPCOL. If you try—it's just not feasible to get those reductions by 2010. And that is—especially if you look at the labor constraints and other things. But we can provide that to you. As I say, it is available on the Website.

Mrs. CAPPS. I submit that, as it has been provided, it is very difficult to make that kind of comparison. I believe it is worth the effort to expend to do that. We need to see results of different levels of improvement or benefit however you are looking at it, because we are talking about people's lives in the balance here. And not just the economic—but the economic costs of their health as well. I would like to move on because—and I will give you time to respond.

I am taken with the example from your presentation on the marginal costs for SO₂ and NO_x reductions and how far along this path you can go with making—and making quite substantial benefits before the costs escalate. That is the kind of balance between apples and apples that I really, as one member of this committee, really ask you for some help in getting. Your current modeling shows that you can achieve reductions at levels like the straw proposal for, well, under \$2000 per ton for both SO_x and NO_x. And that is my concern. Do you think that \$2000 per ton is an unreasonable cost to achieve the public health benefits that I have spoken of earlier?

Mr. HOLMSTEAD. It is hard to say that without knowing the benefits.

Mrs. CAPPS. But those are the questions that I am asking you.

Mr. HOLMSTEAD. I think we would be pleased to sit down with your staff and sort of work through all of those issues. We continue to believe that the key comparison is the current Clean Air Act compared to what is feasible legislatively. And we hope that you will focus on that fact. That is really what we are trying to accomplish here. We are happy to provide you with the kind of information that you are talking about to the extent that we can.

Mrs. CAPPS. That is what I believe this remodeling should do. Because we are comparing the Clean Air Act, so-called, with allowing tens of thousands of people to either die prematurely or suffer respiratory illnesses. I think we need to know basic information about any levels besides the ones that we have—you have decided to put in your bill. You have made that decision, and that is the presentation we get. But there is no—there aren't various scenarios which really would be useful to us.

Mr. HOLMSTEAD. I understand.

Mrs. CAPPS. You agree.

Mr. HOLMSTEAD. As I say, we can certainly sit down with you and provide—and figure out, show you what we have done.

Mrs. CAPPS. I would hope that information that everyone on this committee would want to have. I think you are taking some very serious risks with the public health you are charged with protecting. You want us to essentially replace the Clean Air Act. You say, trust us to this level. You have produced an analysis of your levels but not of any other levels, even slightly more stringent levels. From what I can tell, you can't provide us with any assurances that a lower level would not result in a significant public benefit, one that would greatly outweigh the costs. You say your current modeling will get us nearly all the way to attainment. If that is so, why wouldn't you model it at the level that would get us all the way to attainment so we can compare that with the cost that it would entail?

Let me finish one more paragraph. I think you are leaving a substantial portion of our citizens at risk of significant health effects like premature death and you can't even tell us why. Why don't you model different cap levels and then we can make that determination. And the American people can see what is at stake. Businesses can see what their benefits are and what the costs are.

Mr. BARTON. The gentlelady's time has expired.

Mrs. CAPPS. I think before we throw out the existing Clean Air Act, which has served us well, the public deserves to know what they are going to get in exchange for this. I think that it does deserve that. I think it is within our possibility to achieve the information that is going to be useful to us.

Mr. HOLMSTEAD. Could I take 1 minute to answer?

Mr. BARTON. Briefly. We have one more gentleman who has waited very patiently, Mr. Strickland. We want to give him an opportunity.

Mr. HOLMSTEAD. Just to make sure, we have provided you modeling of four different results, one of which is more stringent than the Clear Skies Act. So you can get a sense from all of these four things. The one thing that I tried to say categorically, and I stake my reputation and the reputation of my agency on it, at least over

the next decade, we will provide substantially greater environmental benefits under Clear Skies than we could under the Clean Air Act.

Mrs. CAPPS. To everyone?

Mr. HOLMSTEAD. If you pass this legislation, the total number of lives saved, of hospital visits avoided, of heart attacks avoided will be substantially lower under Clear Skies than they would under the current Clean Air Act. That I can state categorically.

Mrs. CAPPS. In California as well?

Mr. HOLMSTEAD. Clear Skies has almost nothing to do—the major benefit of Clear Skies for California—

Mr. BARTON. Mr. Waxman is now back. He actually has priority over Mr. Strickland. So Mr. Waxman is recognized for 5 minutes.

Mr. WAXMAN. I yield to Mr. Strickland.

Mr. BARTON. Mr. Strickland is recognized for 5 minutes.

Mr. STRICKLAND. Thank you, Mr. Waxman. I will try to be short here. We have a Nuclear Waste Fund that exists to help management appropriate disposal of nuclear waste. And I emphasize that because ratepayers contribute to this fund. I wish Mr. Markey was here because he was talking about Pennsylvania, but he could have been talking about my district in Ohio in terms of the pollution that he accuses us of sending his way. This is the question I have for Mr. Markey, and I want your response.

Mr. HOLMSTEAD. I would be happy to answer on behalf of Mr. Markey.

Mr. STRICKLAND. I thought you did a pretty good job with the airbag analogy. Why should the cost of cleaning up Mr. Markey's State rest solely on the backs of Appalachian coal miners? Why should those who use the products that come from the dirty mid-western power plants, why shouldn't they pay? Now, to bolster my rationale for this, I see this chart that says under Clear Skies, by 2010 we can avoid 7,900 premature deaths, 17,000 hospital ER visits and so on. These are national benefits. So why shouldn't the cost of achieving them be a responsibility that is shared not just by coal miners in Appalachia or communities where these power plants exist, but why shouldn't we have some national contribution to achieving these results? I want Boston's air to be clean too, but I don't want his—the Boston cleanup to be financed solely by poor communities scattered along the Ohio River. Doesn't it make sense that—am I—tell me I am wrong or right or punch a hole in my argument.

Mr. HOLMSTEAD. The way Clear Skies works because it is truly a national cap-and-trade program for SO₂ which is the primary issue for coal, the costs really are borne nationwide and they are borne in several different ways. They are borne by ratepayers. Even though the incremental rate increase is small, it is shared by ratepayer, the costs aren't passed through in the rates, they are borne by the shareholders of those companies who tend to live nationwide as well. And it is even more shared than that because to the extent that any of those costs go into goods and services, those are borne equally. So I can't tell you exactly what the distribution is, but I can tell you that the costs don't fall exclusively on coalminers. This is one of the issues that we have tried to look at. We actually believe there will be an increase in coal jobs in Appa-

latchia as a result of Clear Skies for this simple reason. When the utility sector has the certainty of what—right now, they don't know what they are going to have to do for mercury. They will—they don't know what to do for NO_x, for the SO₂. On top of that, there is visibility issues and other things. So they have very little regulatory certainty. There is a great deal of concern about investing hundreds of millions of dollars in control technology when they are not sure what the next issue that will come along is going to do. If we can provide that with our certainty all of our analysis and DOE's analysis suggest that at the levels and timing we are talking about, what they would do is install advance pollution controls on all that coal. So they can continue to burn the coal, they just burn it much more cleanly. I think we are all sympathetic to the concern have you raised, but we think this is the way to deal with them.

Mr. STRICKLAND. I would like to point out that, you know, I have heard the pleas of my colleagues from the East for years, and they talk about these dirty power plants. But the fact is their citizens are reaping some of the benefits of those dirty power plants in terms of electricity and some of it that comes from these coal plants is fairly inexpensive electricity. It seems to me those who are receiving the benefits of the product of these plants should at least share in some the costs that may be involved in making them cleaner.

I yield back my time. Thank you, Mr. Waxman, for your generosity.

Mr. BARTON. The gentleman from California is recognized for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman.

Mr. Holmstead, in answering Representative Capps, you implied that Clear Skies is the most that is technically feasible. I would like to introduce for the record a letter from the Institute of Clean Air Companies that shows we can do much more, much faster. I have introduced legislation with Representative Boehlert that was supported by over 130 Members in the last Congress, and this bill is much tougher than Clear Skies and can deliver clean air above and beyond the current law. The ICAC says we have the technologies and resources to implement our bill.

Mr. Chairman, I would like to place this in the record.

Mr. BARTON. We will show it.

Mr. HOLMSTEAD. Can I clarify? What I said is our analysis shows that the first phase of Clear Skies really is about as far as we can go. And our analysis is up on the Web. We have an economic or we have an engineering feasibility study.

Mr. WAXMAN. As I hear your analysis, as you present it today, every deadline under Clean Air Act you say well may not ever be met because there could be litigation. You have argued that the law won't be enforced and won't be met. I think that is not a fair argument to make to us. I think that we can go much further.

Now, the other thing I want to put in the record was a follow up on some of the questions about Section 126. Mr. Markey you told me asked you—you told him we have never needed Section 126 because it would be in attainment. Now, if Section 126 will never be used under Clear Skies, why must we delay and amend it?

Mr. HOLMSTEAD. The real issue is—what we have tried to provide here is to make sure that there is the right incentives for companies to install control technology is regulatory, certainty. If you—if there is a concern about what 126 may do, then that—there continues to be uncertainty and litigation costs and other things. And what we have already determined, as I told Mr. Markey, is even if we had 126—even if we had 126 petitions 2 years ago from his State and Mr. Burr's State and every other State east of the Mississippi, even if we had those 2 years ago and we were in a position today to grant those petitions, we could not get any better emission reductions than we would get under Clear Skies. And—

Mr. WAXMAN. That is hard to believe though. Because the States want to be able to enforce requirements on others where they don't have control in their own jurisdiction to make sure that their neighboring States or regions are reducing the emissions. Under existing law, they can do that. Under your proposal, that tool is removed.

Now, there are a lot of tools that are thrown out in your proposal on the basis that your modeling is going to achieve the results. But if your modeling is going to achieve the results, then 126 is not going to be invoked. But on the other hand, if your modeling were incorrect, then we have that tool, and many other tools, to make sure that we achieve the Clean Air goals. Otherwise, it is as almost a faith-based idea of how we are going to achieve Clean Air. We got to have the faith. If it doesn't work out well, then we will have to have more faith.

Mr. HOLMSTEAD. Let me give you just I think what will be helpful to you, that the only time Section 126 has ever been used in the history of the Clean Air Act was beginning in the mid-90's when there was a real effort by the Northeastern States to control upwind emissions of NO_x. That effort began in a very serious way in 1995. It was pursued very aggressively by the Clinton Administration throughout their whole tenure. By the time they evaluated those petitions, they did a rulemaking, they did a proposed rule, they did public hearings, they did a final rule, they went through at least two rounds of litigation, that effort that began in 1995 and was pursued aggressively at every step of the way including under our administration, the effective date for the first reductions is 2004 for some of the States and we don't yet have an—

Mr. WAXMAN. You can't evaluate the pressure that some of these tools under the Clean Air Act brought on some industries to force them to reach compromises and voluntarily do things that they might not otherwise have done. I would like to introduce for the record two letters, the first is from the Ozone Transport Commission, they say that the OTC States have grave concerns about the 126 provisions because it effectively eliminates use of 126 petition as a constructive tool for the States. And the second letter is from NESCAUM which states that your proposal creates a, "perhaps insurmountable roadblock to any future Section 126 action."

Mr. Chairman, the point I want to make is that Mr. Holmstead said if you look at the acid rain proposal with all the caps-and-trades that we achieve the goals. I think it is a great success, but we didn't eliminate all the tools that made sure that it worked. We didn't eliminate the new source review for local power plants. We

didn't eliminate the deadlines. We didn't eliminate all the things that this bill would have us throw out of the Clean Air Act, which then relies solely on a belief that cap-and-trade will succeed without the tools to make sure that there is a back up so that we can actually achieve what we promise to achieve in the law.

Mr. BARTON. I thank the gentleman. The Chair has reviewed the last letter you asked to be put in the record and has no objection. We will put that in the record.

We now want to turn to the cover boy of yesterday's roll call magazine, Mr. Bass, who is not a member of the subcommittee but, as is the tradition of the committee, once all members of the subcommittee have had an opportunity to ask questions, we give members of the full committee such an opportunity. And the gentleman from New Hampshire, our cover boy of the week, is recognized for 5 minutes.

Mr. BASS. I thank the distinguished chairman of the subcommittee for giving me the courtesy to speak for a minute or 2 on an issue that is extremely important. Coming from New Hampshire, I find myself in the same situation as my friend from Massachusetts and from Maine. I would only point out a couple of items. First of all, New Hampshire like North Carolina apparently has passed its own three-point—in fact, four-point pollutant limits on NO_x, SO_x, and mercury which are considerably more stringent than those which are contemplated under Clear Skies. We are, as a State, an exporter of energy. We have coal-fired facilities that are prepared to meet these standards, and we also provide—produce a significant amount of nuclear power.

Secretary Holmstead, I am also confused and concerned about the apparent lack of clarity between the status quo, the current Clean Air Act law and the provisions contemplated under Clear Skies. This straw proposal that has been mentioned did indeed outline goals that might be attained under current law by 2010, which vary greatly from those contemplated under Clear Skies. I thoroughly understand your point that is because the current Clean Air Act does not establish overall caps, you have NO_x way of knowing whether you reach attainment or not in a given area. Yet there is this conflicting information about a proposal that was sent to the administration which did, in fact, do or try to do what is now more difficult to do. I think you have to conclude that under the current law, there is a pretty good chance that NO_x, SO_x and mercury levels would be lower under current law than they might be under Clear Skies, although there are some good things about the concept of having national caps to reach standards versus doing it on a piecemeal basis.

I don't have a question to ask, Mr. Chairman, but I would agree that the national cap model is a good one, but—and I support caps-and-trade, the problem is setting those standards and setting them at the appropriate levels so that so that regions of the country, such as my State, that are actually exporters of energy but in non-attainment in having serious systemic problems meeting air quality standards, can see significant improvements over the next 10 years. Would you agree with that?

Mr. HOLMSTEAD. Yeah. And if I could just reiterate something, and again, just very personally assure you that if you were to pass

Clear Skies exactly as it is tomorrow, I can guarantee you that your State would have significantly cleaner air, at least over the next decade, than you would have under the current Clean Air Act. NO_x emissions would be lower, SO₂ emissions would be lower, mercury, the emissions start sooner, exactly what happens under the existing law I can't tell you. But certainly for NO_x and SO_x, I can guarantee you for the next decade you will have much cleaner air in New Hampshire than you would have under the current law.

Mr. BASS. I thank the chairman.

Mr. BARTON. That concludes all of our questions. I want to make a clarification before we adjourn this first hearing. The straw proposal that has been talked about at some length, my understanding is that was an alternative that was put together within the EPA and the administration while you were determining what, if any, legislative proposal to put forth and it was just that, it was a scenario that was debated and you looked at the cost benefit analysis, you may have looked at some of the political consequences and where the votes might be, but ultimately it was decided that the proposal that was put forward in the Clear Skies Initiative, for a number of reasons, was superior to that. So there is really no reason to extensively model it, because it was just an alternative that was reviewed in the normal give and take of preparing a legislative initiative. Is that not correct?

Mr. HOLMSTEAD. That is absolutely correct.

Mr. BARTON. We wish to thank you for your attendance. I think you can look forward to future requests for your attendance. We are going to do a number of hearings on the Clear Skies proposal. Our next hearing will be interested parties that are not a part of the administration. This hearing is adjourned.

[Whereupon, at 4:55 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 12 2004

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Henry A. Waxman
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Waxman:

Thank you for your letter of July 21, 2003, to Assistant Administrator Jeffrey Holmstead, including a series of questions following the July 8, 2003 hearing on the Clear Skies Act before the Subcommittee on Energy and Air Quality of the House Committee on Energy and Commerce. I am pleased to respond to your letter and have enclosed Mr. Holmstead's answers to your questions.

If you or your staff have further questions please contact me or Lora Strine at (202) 564-3689.

Sincerely,

John E. Reeder
Principal Deputy Associate Administrator

Enclosures

**ANSWERS TO
QUESTIONS FOR
JEFFREY R. HOLMSTEAD, ASSISTANT ADMINISTRATOR**

1. Your oral testimony included a series of overhead slides that had not been submitted to the Subcommittee in advance of the hearing. Please provide the slides that you presented with your oral testimony.

See Attachment A.

2. Several of the maps you used as overhead slides to illustrate the claimed benefits of the Clear Skies proposal were at best confusing and arguably misleading. For example, you showed maps of 8-hour ozone nonattainment areas in the United States in 2001 and 2020, while discussing the benefits of Clear Skies in reducing air pollution. Your slide noted that the areas in violation of the ozone standard would drop from 290 counties in 2001 to 27 in 2020, with implementation of Clear Skies and other air programs. The strong implication was that this improvement was due in large part to the effects of the Clear Skies program. Yet according to EPA's own modeling, Clear Skies will only help three counties reach attainment for the ozone standard, reducing the number of ozone nonattainment areas from 30 to 27 in 2020. Other programs contained in final and proposed regulations, not Clear Skies, are responsible for cleaning up the other 260 counties.

EPA has also developed maps that show specifically the effects of Clear Skies in 2020, by comparing the extent of nonattainment areas without adoption of Clear Skies to the extent of such areas with Clear Skies in place. Why did you choose to use graphics that suggest an inflated benefit from Clear Skies, rather than graphics that clearly illustrate the specific effects of the program that you are asking Congress to adopt?

Although I was given more time than usual for my oral presentation, I still had to select key messages and present only highlights from the extensive analyses EPA has conducted on Clear Skies. I chose to present an overview of projected air quality improvements – focusing on the big picture of how much progress we could make and how much of the air pollution problem we could solve by 2020 if we were to implement Clear Skies, our proposed non-road diesel rule, and existing control programs. To illustrate this point, I presented two slides with four maps, for both ozone and particulate matter. To be clear about what programs would achieve these benefits, we specifically used titles that made it clear that the improvements in air quality were not just from Clear Skies. The slides were titled "Clear Skies *with Other Air Programs* Would

Substantially Improve [Fine Particle/Ozone] Attainment over the Next Two Decades." (Emphasis added.)

The slides, were intended to be an accurate representation of the benefits of Clear Skies and other air programs. During the hearing, when I showed the nonattainment maps for ozone, I noted that much of the improvement was due to programs other than Clear Skies. I stated, "Now, in the case of ozone, much of this has to do with other things besides just Clear Skies. In particular the NOx SIP Call, the mobile source rules that are in place, including some of the ones we have done in the last couple of years" (July 8, 2003 Clear Skies, House Energy and Commerce Hearing Transcript.)

When EPA has had more time for presentations, EPA has presented the full set of 10 separate maps showing ozone and PM2.5 attainment status (current monitored data, 2010 projections both with and without Clear Skies, and 2020 projections with and without Clear Skies). In particular, EPA presentations to House Energy and Commerce Committee and additional House staff made prior to the hearing included all of these maps to clarify which air quality and related benefits result from the existing Clean Air Act control programs and which incremental benefits result from Clear Skies. We also provided the complete set of 10 maps in more detailed briefings that we gave states, environmental groups, industry, and the press. In addition, the full technical briefing materials have been placed on the EPA Clear Skies website.

Illustrating the tremendous strides we can make in bringing areas into attainment with the fine particle and ozone standards was not intended to cause confusion with regard to the relative effectiveness of current programs for ozone. We certainly have made this distinction quite clear in our more comprehensive presentations and will continue to do so. But this does not diminish the very substantial net benefits that can be attributed to Clear Skies alone. Clear Skies alone is projected to provide over \$110 billion in monetized health and visibility benefits. This does not include benefits that we cannot quantify or monetize, including decreased acidity of sensitive water bodies, increased protection of coastal waters, and reduction of mercury in fish. The monetized portions of these benefits alone greatly exceed the costs of the program and justify moving forward.

3. Several weeks ago, Congressional staff were briefed by staff from the White House Council of Economic Advisors, the Energy Information Administration, and EPA. According to the Administration staff, both the EPA model and the EIA model assume that if a plant installs activated carbon and fabric filters, it will get a 90% mercury reduction on all coal types.

At the hearing, Representative Waxman asked whether you agreed with the EIA and EPA technical modeling experts that technology is available to reduce mercury emissions by 90% from all types of coal. You replied that the degree of control achieved depends on the type of coal. That is not what is incorporated in the existing models, however. Please explain under what circumstances you believe that the application of both activated carbon injection and fabric filters on a unit would fail to achieve a 90% reduction in mercury emissions from all types of coal. Please provide technical data that supports your answer. If you do not agree that, as a general matter, use of activated carbon injection and fabric filters

on a unit would be expected to achieve a 90% reduction in mercury emissions from all types of coal, please explain why this assumption is incorporated in both EPA and EIA's models.

Currently, mercury control on power plants is being achieved by existing controls for NO_x, SO₂, and PM. Different types of coal may achieve different mercury reductions from units with PM, SO₂ and NO_x controls installed. Recent test data indicates that the installation of NO_x and SO₂ controls on plants burning bituminous coals resulted in greater mercury reduction on average than plants burning subbituminous coals or lignite coals. Likewise, the test data indicated that installation of NO_x and SO₂ controls on plants burning subbituminous coals resulted in somewhat greater mercury removal than plants burning lignite coals. On average, units burning lignite coal showed the least mercury removal of the three coal types. However, there is limited data on mercury removal from lignite coal.

At this time there is no technology for power plants that has been demonstrated to achieve and sustain 90% removal of mercury from all coal types. Both EPA's and EIA's models are designed to evaluate future policy scenarios. Because we expect that activated carbon injection (ACI), used in combination with other pollution control technology, will eventually be able to achieve 90% mercury control from all coal types, the models incorporate this assumption.

Currently, however, no coal burning power plants use commercial ACI to control mercury emissions; and to date, only a very limited set of short-term full-scale trials of ACI have been carried out. These trials do not cover a complete range of representative combinations of coal type and pollution controls that would be required to demonstrate widely achievable levels of mercury control that might be achieved in a cost-effective manner. Furthermore, they represent short-term (4-9 day) continuous operation and do not address all the operational issues and residue impacts that may be associated with commercial operation.

Although EPA and the private sector are relatively early in the process of developing ACI for coal-fired power plants, initial test results have been promising. Full-scale tests of ACI at three units burning bituminous coal have achieved 90% mercury removal for a limited time (although a similar test at a fourth unit burning bituminous coal only achieved a maximum control level of 73%.) Pilot scale data on subbituminous and lignite coals indicate that ACI with a retrofitted fabric filter also should be able to achieve a similar level of control. EPA's Office of Research and Development (ORD) has evaluated currently available information and research, development, and demonstration (RD&D) needs and has established a set of RD&D goals related to the control of mercury from coal-burning power plants. We believe that these goals are reasonable if there continues to be a sustained effort by the federal government and the private sector, including additional research and development, large-scale testing, and commercial demonstrations. With respect to ACI, EPA's RD&D goal is to demonstrate by 2010 that ACI with a retrofitted fabric filter can achieve 90 percent control of mercury for all widely used combinations of coal types and control technology.

Once ACI is commercially available, additional time will be necessary to enable this technology to be deployed widely in the power sector. Even then, we expect the cost of achieving similar levels of mercury control to vary depending on the type of coal

burned and other factors. Thus, EPA modeling makes different assumptions about the cost and operation of ACI depending on a variety of factors – most importantly, coal type, unit size and other control devices installed at the facility.

4. The Clear Skies proposal would repeal the mercury MACT requirement, replacing it with an emissions cap that would only aim for a 45% reduction in annual mercury emissions from power plants through 2017. Under Clear Skies, at best mercury emissions would achieve a 69% reduction, some years after 2020. Even this is uncertain, as EPA's newest modeling results predict that mercury emissions would never get down to these levels, instead only reducing emissions somewhere in the 50% to 60% range.

Under Clear Skies, what quantity of mercury emissions from power plants do you project in 2008?

For Clear Skies to reduce mercury emissions by at least as much as a mercury MACT standard, the MACT standard would have to be no more stringent than the quantity identified in the previous question. Have you conducted any IPM modeling, technology assessments, cost estimates, or any other less formal analysis or estimates related to the establishment of a mercury MACT standard set at that level? Have you conducted any such analysis related to the establishment of a mercury MACT standard set anywhere in the range of 34 to 46 tons? In the range of 26 to 34 tons? In the range of 15 to 26 tons? In the range of 5 to 15 tons? Please provide all such IPM model runs, technology assessments, cost estimates, or other estimates and analyses.

Do you claim that Clear Skies will reduce mercury emissions by as much as or more than the mercury MACT standard would under the Clean Air Act? Do you claim that Clear Skies will achieve such reductions at least as quickly as would a mercury MACT standard that came into effect by December 15, 2007?

EPA's most recent Clear Skies modeling (released in July 2003) projects that mercury emissions from the power sector in 2008 will be about 33 tons (and will continue to fall over time) if Clear Skies were enacted.

EPA proposed a MACT standard for power plants on December 15, 2003. The proposed MACT standard would result in mercury emissions from power plants of about 34 tons in 2008. The Agency will consider public comments submitted on the proposal and issue a final rule in December, 2004. Until the entire rulemaking process is complete, it is not possible to determine whether the CSA would obtain mercury reductions greater or less than the Utility MACT. We can be fairly certain, however, that under Clear Skies, reductions would begin to occur sooner than would be the case under MACT. If Clear Skies were to pass, sources would have an incentive to reduce SO₂ emissions immediately, which should also result in reduced mercury emissions. Unlike Clear Skies, the MACT standard would not have a second phase and total emissions could increase because it is a technology-based standard instead of a cap. The Clear Skies' second phase cap would assure that mercury emissions would

continue to decline below the 2008 level.

EPA has posted on its web site the IPM analysis it conducted of the proposed MACT standard (<http://www.epa.gov/airmarkets/epa-ipm/utilityhgredux.html>). As part of the MACT FACA process, EPA conducted some preliminary modeling using IPM. Those analyses are available on the Utility MACT website <http://www.epa.gov/ttn/atw/combust/utltoox/utoxpg.html>. Those IPM analyses were conducted using assumptions from EPA's 2000 model update. Since that time, with input from the FACA process, EPA has revised its modeling assumptions with regard to mercury. These revisions were used in our 2003 Clear Skies modeling.

5. EPA committed to the mercury MACT workgroup that it would model a variety of policy options for the mercury MACT standard. Several key options are significantly more stringent than Clear Skies. But EPA delayed and then cancelled its plans to conduct the modeling in February and March of this year.

Representative Waxman and Representative Allen, with several colleagues, asked EPA for this analysis in May. Governor Whitman responded that the modeling would be completed by December 15, 2003, when EPA issues the proposal. In other words, you plan to complete the modeling by the date on which you will issue the proposed rule that such modeling is intended to inform. Under such a schedule, EPA would not be able to take the modeling results into account or even include them in the text of the proposal. Under those circumstances, it would be difficult to argue that EPA had provided the public the opportunity to comment on the basis and purpose of the rule, as is required under the Administrative Procedure Act and section 307(d) of the CAA.

Section 112(d) of the CAA requires EPA to establish a MACT standard based on the maximum degree of reduction in emissions that the Administrator determines is "achievable," "taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements." With evidence that a 90% reduction is technologically achievable, EPA may propose a weaker MACT standard only if it finds that requiring a 90% emission reduction is too costly (or if other non-air quality health and environmental impacts and energy requirements make a 90% reduction unachievable). It does not seem that EPA could make a legally defensible determination to reject a requirement for 90% control levels without assessing what such a requirement would cost.

Governor Whitman's response stated that August 1, 2003, is EPA's interim target date for reaching "tentative decisions...on key policy issues" and completing the drafting of the proposal package. It is simply not plausible that EPA would develop and draft a proposal without obtaining this readily available information, unless EPA plans to issue a rule that will be patently indefensible if challenged. Please provide a specific date or range of dates for completing the IPM modeling.

Will you complete either the IPM modeling or any other assessment of the costs of regulatory options for control levels prior to making decisions on the "key policy issues" and completing a draft of the proposal package? Are you still planning to meet the August 1 target date?

EPA's IPM analysis of the proposed MACT standard is available on EPA's web site (is at: <http://www.epa.gov/airmarkets/epa-ipm/utilityhgredux.html>). EPA believes that the proposal represents the maximum achievable emission reductions within the framework created under section 112(d) of the Clean Air Act. We welcome comments on the proposal.

The Utility MACT Working Group was a Federal advisory committee organized for approximately one year as a working group under the Clean Air Act Advisory Committee (CAAAC). The Working Group finished its work when it delivered its final report to the CAAAC on October 30, 2002. The meetings and report were very informative and helpful to the rulemaking process.

6. You frequently cite the uncertain effect of litigation as a reason why we cannot rely on requirements under the Clean Air Act to come into effect on the dates required. In the case of the new NAAQS and the NOx SIP Call (with the related section 126 rule), court-imposed stays of the regulations caused substantial delays in the effective dates, although these actions were ultimately largely upheld by the courts. However, these examples appear to be the exception, rather than the rule, as courts generally refrain from staying environmental regulations during the course of litigation.

Please provide a list of all of the Clean Air Act final 307(d) rules promulgated by EPA since the adoption of the 1990 Clean Air Act Amendments. Of those rules, please indicate all of the rules that were challenged in court. Of the rules challenged, please indicate which rules were stayed by the court for the pendency of the litigation and the period of the stay.

The Bush Administration continues to believe that the Clear Skies Act is the best approach to reducing power plant emissions, and EPA remains hopeful that Congress will make Clear Skies law. At the same time, however, we must act now to help states and local communities meet air quality standards for fine particles and ozone. The recently proposed Interstate Air Quality Rule is a regulatory alternative to Clear Skies. This plan will allow us to take an enormous step forward in cleaning the air across much of the country. Once we promulgate a final rule, States will then have to begin to adopt their own laws or regulations, which would set the specific regulatory requirements those sources would have to meet.

Unfortunately, once EPA promulgates such a regulation, it is likely to be challenged in court. Such a challenge could result in delay in a variety of ways. First, pursuant to a petition for reconsideration, EPA could decide to stay part or all of the rule for a period of up to three months (see CAA section 307(d)(7)(B)). Or, outside the context of a petition for reconsideration, a party could request EPA to stay its regulation

for a longer period of time, such as during the pendency of litigation. If EPA refuses to stay its regulation, a party could seek a judicial stay, such as the stay that was issued in the NOx SIP Call case. Primarily because that stay was granted, the court moved the federally required compliance date for sources back 13 months to May 31, 2004. While such stays are not frequently granted, they do present a risk that is absent for choices made in legislation. In addition to delays caused by a stay during litigation, delay can result based on the court's ruling. For example, in the ozone NAAQS litigation, the Court of Appeals for the District of Columbia Circuit ruled that EPA had interpreted the Clean Air Act in a manner that resulted in an unconstitutional delegation of power. In addition, the Court struck down EPA's implementation plan, determining both that a revised ozone standard must be implemented under certain provisions of the Act and that those provisions made the standard "unenforceable." While the Supreme Court ultimately rejected the Court of Appeals' decision entirely on the constitutional issue and in part regarding implementation of the ozone standard, the uncertainty created by the appellate court delayed implementation of the revised ozone standards by several years. Delay can also be caused if a court ultimately rules against EPA in whole or in part. While EPA always makes its best efforts to defend its regulations, some challenges to regulations are ultimately effective. Finally, even if a court does not delay implementation, legal challenges to rules create uncertainty that may cause entities regulated under a cap and trade program to delay taking early action.

We have enclosed two lists of lawsuits that together list all the challenges brought against EPA under the Clean Air Act since 1990. (Attachments B and C.) Generally, cases for which the court of origin is the district court are lawsuits claiming that EPA failed to comply with a mandatory or discretionary obligation to take action under the Clean Air Act. Cases brought originally in the court of appeals are challenges to final actions EPA has taken under the Act. These other cases include all challenges to final EPA action under the Clean Air Act, not just challenges to final rules subject to Section 307(d) procedures. EPA does not maintain a list of all regulations it has issued under the Clean Air Act and the litigation, if any, challenging those regulations; nor does the Agency maintain a comprehensive list of regulations that have been delayed due to legal challenges.

7. Please describe and illustrate with maps and/or charts the degree to which Clear Skies is projected to reduce mercury deposition in the Great Lakes region in 2010 and in 2020, under EPA's new modeling. Please provide this information (1) assuming that the "safety-valve" for the costs of mercury controls is triggered, and (2) without the safety-valve.

Under existing EPA regulations, mercury emissions from municipal waste combustors will drop over 90% from 1990 levels, mercury emissions from medical waste incinerators will drop over 90% from 1990 levels, and mercury emissions from hazardous waste combustors will drop 55% from 1997 levels.

EPA's air quality modeling analysis projects that Clear Skies would reduce mercury deposition 5-15% throughout the Southern Great Lakes region by 2020 and that mercury deposition in the Northern Great Lakes in 2020 would be similar to current levels. Our modeling analysis projects smaller mercury emission reductions in 2010 than in 2020. The air quality modeling analysis was conducted using emissions

projections that do not include a trigger of the safety valve provision of the Clear Skies Act. This was done because EPA believes that by 2020 emission control technologies will have matured considerably, and thus we do not expect the safety valve to be triggered.

See maps in Attachment D depicting projected mercury deposition under Clear Skies without the safety valve for more detail.

8. In a December 2000 regulatory determination, EPA found that arsenic and other metals such as chromium, nickel, and cadmium are of potential concern for carcinogenic effects. A new study has added to concerns about cadmium by suggesting "a direct link between low-dose cadmium exposure and increased risk of breast cancer."¹¹ *Metal Mimics Estrogen, May Pose Cancer Risk*, Washington Post (July 14, 2003). Additionally, EPA has found that dioxins, hydrogen chloride, and hydrogen fluoride are three additional hazardous air pollutants that are of concern. EPA stated in 2000 that these pollutants may be further evaluated during the regulatory process for establishing a utility MACT standard.

Under existing law, EPA will finalize a MACT standard by the end of 2004. Current law requires that this MACT standard address both mercury and other toxic pollutants of concern such as arsenic, dioxin, and cadmium. However, the Clear Skies Act repeals the authority to set a MACT standard for these pollutants and establishes no new controls for hazardous air pollutants other than mercury. There is other authority under the CAA that EPA might be able to use to regulate non-mercury air toxics from power plants. But Clear Skies also bars EPA from regulating these pollutants under such authority before January 1, 2010, and it does not require reductions in emissions at that time.

Has EPA estimated the levels of cadmium and other listed air toxics that will be continue to be emitted by power plants under Clear Skies? If so, please provide that data. If not, how does Clear Skies provide levels of control (in terms of both timing and stringency of limits) of these emissions of heavy metals from power plants that are equivalent to likely controls under the MACT air toxics requirement?

Has EPA performed additional analysis since December 2000 that indicates that these hazardous air pollutants are no longer of concern? If so, please provide us with this additional analysis. If not, please explain why EPA has proposed to ignore these potential health effects at least for a decade and perhaps indefinitely.

The premise of the question (that, as part of a MACT standard issued under section 112 of the Clean Air Act, EPA would regulate non-mercury HAPs from coal-fired power plants) is incorrect. The EPA interprets section 112(n)(1)(A) as only authorizing

regulation of utility units under section 112 with respect to HAP emissions from such units that EPA has determined are "appropriate and necessary" to regulate under section 112 because they are reasonably anticipated to result in a hazard to public health even after imposition of the other requirements of the Clean Air Act. Because EPA's December 2000 determination only made such a finding as to, at most, mercury emissions from coal-fired units and nickel emissions from oil-fired units, EPA's proposed rule under section 112 only addresses those HAP emissions from the respective units. See, "Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units; Proposed Rule," 69 Fed. Reg. 4652 (Jan. 30, 2004). Clear Skies would limit emissions of mercury from coal-fired units and nickel from oil-fired units. Thus, it would impose emission limitations on the same pollutants that would be regulated under a utility MACT standard.

9. Section 126 of the CAA is designed as a backstop protection for downwind states. If Clear Skies eliminates the transport problem for downwind states, such states will not be able to make the showing of significant contribution necessary to obtain relief under section 126. In that case, the continued existence of section 126 cannot impose any burden on upwind sources and states. Alternatively, despite the enactment of Clear Skies, downwind states may continue to suffer from transported pollution and upwind emissions may significantly contribute to nonattainment in the downwind states. In that case, Clear Skies would have failed to eliminate the problem that section 126 was designed to address, and the downwind states would need the relief provided by section 126.

It seems logically impossible that the section 126 mechanism can be simultaneously unnecessary and burdensome to upwind sources. Please explain why the Administration is proposing to essentially repeal this state protection by first staying section 126 altogether and then modifying the criteria

for making a finding under section 126 in a way that will make it practically impossible for a downwind state to obtain relief.

We believe that the first phase reductions in NO_x, SO_x and Hg in Clear Skies would push the power generation sector about as far and fast as is technically and economically feasible. Even if downwind states had already submitted petitions, cumulative reductions over the next decade would not be any greater if we granted those petitions than they would be under Clear Skies.

The cap and trade approach to reducing emissions from the power generating sector is the most efficient route to reduce pollution from this sector. The Acid Rain program's outstanding success demonstrates the benefits of this approach. Clear Skies provides the power generation sector with certainty about upcoming regulations and promises the public a mandatory program to reduce air pollution. Prematurely interfering with the proven mechanisms of Clear Skies could undermine the efficiency of a market-based approach.

One of our goals is to get the most air quality improvement for the dollars we as a society spend to improve our air quality. Clear Skies would establish a new standard for granting section 126 petitions that specifically incorporates cost-effectiveness and air quality considerations. Because it may be technically difficult to determine cost-effectiveness per air quality impact, the CSA provision eliminates this requirement if it is not technically feasible to implement it.

10. Please provide updated benefits data for the Straw Proposal, enabling us to directly compare the projected benefits of the Straw Proposal versus Clear Skies under EPA's revised model. If EPA has not yet conducted this modeling, in the interim please provide whatever information you can through extrapolation or other means regarding the expected benefits of the Straw Proposal under the revised model.

The Straw Proposal was one of several multi-pollutant options considered by the Administration in the process of developing the President's Clear Skies Act. EPA projected the benefits of the straw proposal and several other multi-pollutant scenarios to assist Administration policy makers in their policy discussions on multi-pollutant legislation. A full economic, air quality and benefits analysis of a utility multi-pollutant scenario is expensive and takes several months to develop. For those multi-pollutant scenarios for which we performed both economic (cost) and air quality modeling (which includes an option very close to the Straw Proposal), we have provided analyses to the Committee.

EPA undertook an extensive, 4-month effort to update the economic, air quality and environmental models and prepare a new analysis of the Clear Skies Act of 2003. Given the expense and time of running these models, EPA has not run the full suite of

updated models for any scenario other than the Clear Skies Act of 2003. EPA has run its economic model for and estimated the benefits of Senator Carper's bill, which is provided as Attachment E.

11. Your testimony discusses the reduction in chronically acidic waterbodies under Clear Skies, but you did not address the effect on episodically acidic waterbodies. Please indicate the number of episodically acidic waterbodies projected under the base case and under Clear Skies in 2010 and 2020. What is the definition of an episodically acidic waterbody? To what extent do such episodically affected waterbodies support fish and plant life?

When analyzing the effects of Clear Skies on lakes and streams, EPA focused on the Northeast and the Southeast the areas of the country with most acid-sensitive aquatic ecosystems. The results of our 2003 analysis are presented below.

From this analysis, we found a small improvement in reducing the percentage of southeastern streams that are episodically acidic. This is primarily due to the long period of time that southeastern soils hold decades of acid loadings that continue to be released, even as loadings are reduced. Thus, in the Southeast, Clear Skies would slow the deterioration of stream health expected under the Base Case and would prevent additional streams from becoming chronically acidic. In the Northeast, there is an initial appearance of a perverse effect of more lakes characterized as episodically acidic, but actually most of these lakes have shifted from the more serious chronically

acidic category to episodically acidic. In fact, Clear Skies is projected to eliminate chronic acidity in Adirondack region lakes, whereas more than 1 in 10 is chronically acidic in the Base Case in 2020.

12. Under the CAA, localities would have to meet the new NAAQS for PM2.5 and 8-hour ozone "as expeditiously as practicable" and no later than 2009, or at the latest by 2014 if EPA chose to extend the deadline. Under Clear Skies, how many areas are projected to be in nonattainment for either of the new standards in 2009 and 2014? What is the projected population of those areas in those years?

We have conducted air quality forecasts for Clear Skies only for 2010 and 2020. Our most recent analysis projected that, in 2010, Clear Skies would bring an additional 42 counties into attainment for the annual fine particle standard and an additional 3 counties into attainment for the 8-hour ozone standard. Absent additional state or federal regulation, 124 counties nationwide (with a population of 77.1 million people) would have monitoring data showing that they were not attaining one or both of these standards in 2010. In 2020, we forecast that under Clear Skies, with other programs, only 38 counties (with a population of 47.6 million people) would not attain one or both of these standards. It is reasonable to expect that the results expected in 2014-15 would be in between those results forecast for 2010 and 2020.

In your question you reference the attainment dates in subpart 1 of part D of title I of the Clean Air Act as the attainment dates that would apply for the 8-hour ozone and fine particle standards. EPA believes that these attainment dates would apply for purposes of the fine particle standard. However, as to the 8-hour ozone standard, the Supreme Court rejected EPA's approach that would have applied the subpart 1 provisions to all areas for the 8-hour ozone NAAQS. On June 2, 2003 EPA proposed a rule on how to implement the 8-hour ozone standard, which provided two options. Under one option, all 8-hour ozone nonattainment areas would be subject to the attainment date provisions in subpart 2 of part D of title I of the Act. Under the second option, a subset of the 8-hour ozone nonattainment areas would be subject to the attainment date provisions in subpart 2 of part D of title I of the Act and the remainder would be subject to the attainment date provisions in subpart 1. EPA intends to designate 8-hour ozone nonattainment areas in 2004, so the attainment dates for areas subject to the provisions of subpart 2 would range from 2007 until 2021.

13. EPA's base case for evaluating the effects of Clear Skies assumes that the states take no action to reduce air pollution and attain the health-based standards of the Clean Air Act. EPA has dubbed this the "Rip Van Winkle" scenario, in which state and federal regulators go to sleep until 2020. However, as noted in the previous question, states must act to reach attainment in most areas by 2014, at the latest. EPA must also promulgate a power plant air toxics rule, to be effective as of late 2007. EPA itself has acknowledged that the Rip Van Winkle scenario will not actually occur. At the hearing you asserted that Clear Skies will

achieve greater emissions reductions than would be achieved under the existing Clean Air Act, at least for the next decade.

How can you substantiate this claim when EPA has refused to provide information projecting the emissions reductions that would occur if EPA and the states carried out the existing Clean Air Act requirements? If EPA has in fact modeled a base case scenario that assumes that EPA and the states comply with the Clean Air Act, please provide that analysis and all underlying assumptions.

The approach EPA's Office of Air and Radiation used to model the base case for Clear Skies is the same approach the Office has used for at least the last decade to

model base cases in conducting benefits analyses when proposing and finalizing rules under the Clean Air Act. Base cases are designed to predict future emissions or air quality levels for adopted regulations that set specific emission levels for specific sources. Base cases are not designed to predict what regulations are going to be adopted in the future or to predict the emissions or air quality impact of those future regulations.

For the Clear Skies analysis, EPA modeled a base case scenario to predict what power plant emission levels would be through 2020 given the current regulatory control programs. Consistent with our normal approach, we did not attempt to predict future state or federal regulations. Under EPA's standard practice for modeling the amount of power plant pollution that would be reduced by the Clean Air Act or by a particular program, we need to know what specific limitations would be put on power plants and what the deadlines would be. We had this information for regulatory control programs that were in place when we ran the model (e.g., the NOx SIP Call, the Acid Rain Program, and certain state rules in Connecticut, Texas, Missouri and North Carolina), but we did not have that information for regulations that were not in place or had not even been proposed. In particular, we did not have this information for programs to reduce air toxic emissions from power plants and for programs to meet the 8-hour ozone and fine particle NAAQS. Although the NAAQS are standards that are in place, they do not prescribe emission limits for the utility industry. When we did the Clear Skies analysis this past summer, we could predict that power plants will be required to reduce their emissions to help bring areas into attainment with the NAAQS. However, we could not predict with precision the exact limitations or deadlines that would be imposed.¹

For purposes of evaluating the effects of Clear Skies, EPA did not model a scenario that assumed full implementation of the current Clean Air Act because EPA did not have a basis for selecting specific emission levels and timing for future state and federal regulatory actions that will be necessary to implement the NAAQS. However, based on EPA's experience with the acid rain program and the NOx SIP Call, EPA was able to conclude last summer that passing Clear Skies that year would provide greater cumulative power plant emission reductions over the next decade than under regulatory implementation of the current Clean Air Act.

Based on past experience, EPA was able to predict that power generators would begin reducing emissions almost immediately under Clear Skies because cap-and-trade programs include economic incentives for early action and Clear Skies' key programmatic choices would be made by Congress (and thus would not likely be litigated). Early reductions of a large magnitude are projected, particularly in the case of SO₂, due to the ability to bank allowances under the existing Acid Rain program. As a result, under Clear Skies, we project that the cumulative reductions of the three pollutants through the end of this decade would be quite significant. In contrast, we concluded that, under a regulatory approach, it would be unlikely that power plants would be required (or have significant incentive) to reduce emissions significantly in the

¹ Please note that in the most recent air quality analysis of Clear Skies, EPA slightly deviated from our normal approach by including the proposed non-road diesel rule in the air quality analysis. EPA included the specific emission limits and timing that were in the proposed non-road rule both because there is broad support for the rule and in response to requests from numerous stakeholders.

near term. Power plants are unlikely to make significant reductions until they have a high level of certainty about their regulatory obligations. Given the time to put rules in place, the possibility of litigation, and the time for installation of significant new control technology on large numbers of sources, it is hard to see how the current law could begin to deliver significant reductions as early as Clear Skies would have if enacted last year. Given feasibility constraints through 2010 (such as the availability of skilled labor and the length of time to install controls), last summer EPA predicted that full implementation of the current Clean Air Act would not be able to produce much greater annual emission reductions towards the end of this decade. Thus, for the next decade, EPA projected last summer that Clear Skies would deliver greater cumulative emission reductions than would regulatory implementation of the current Clean Air Act.

Examination of the proposed Interstate Air Quality Rule (IAQR) helps to show why Clear Skies would provide greater cumulative emission reductions over the next decade than would the current Clean Air Act. The proposed IAQR is a very aggressive regulatory approach for achieving the level of regional power plant reductions that are appropriate given both the need to attain the PM_{2.5} and 8-hour ozone NAAQS and feasibility concerns. Thus, it is one measure of the level of reductions that would be expected from power plants under full implementation of the current Clean Air Act. For the reasons described above, Clear Skies would provide power plants with immediate regulatory certainty upon passage, with resulting annual emission reductions beginning almost immediately. In contrast, under the proposed IAQR, power plants would not have the same level of certainty about their regulatory obligations for several years, and would likely not have the same incentive to make reductions during that time period. EPA is planning on issuing a final IAQR later this year. If EPA finalizes the proposal as is, states would have 18 months to submit the state implementation plans required to comply with the IAQR, and these plans would then have to be approved by EPA. Litigation could further delay both emission reduction requirements and the certainty industry needs to have an incentive to start reducing emissions. Thus, for the near term, immediate passage of Clear Skies would provide greater annual emission reductions than would finalization of the IAQR. Eventually, annual emission levels under the IAQR would be similar to those under Clear Skies. (EPA's 2003 modeling (in support of Clear Skies and the proposed IAQR) projects that, in 2010, power plants would emit 6.1 million tons of SO₂ and 5.3 million tons of NO_x under Clear Skies and 6.1 million tons of SO₂ and 5.4 million tons of NO_x under the proposed IAQR. EPA projects that in 2015 power plants would emit 5.3 million tons of SO₂ and 1.7 million tons under Clear Skies, and 5.4 million tons of SO₂ and 2.1 million tons of NO_x under the proposed IAQR.) Since EPA projects that Clear Skies would provide greater annual emission reductions initially and similar annual emission reductions towards the end of the decade, Clear Skies would provide greater cumulative power plant emission reductions over the next decade than would the proposed IAQR.

14. Clear Skies would establish "transitional areas," which would be designated based on an EPA modeling projection that these areas would meet

the NAAQS by 2015. Under current law, areas that do not meet an NAAQS standard are designated nonattainment areas and must achieve "lowest achievable emissions rates" (LAER) for new and expanded sources in all contributing industrial sectors, not just power plant emissions. Since Clear Skies just provides a cap for power plant emissions, it seems that the transitional area designation creates a loophole for all other major industrial sources.

What is EPA's justification for relaxing the emission standards for oil, chemical, paper, and other industries in areas that will be designated as transitional? Does EPA's modeling for each potential candidate area for transitional status take into account the effect of allowing new and expanded sources to increase emissions without the limitations that would otherwise be imposed by LAER requirements? As many of these sources have very long lived capital stock, has EPA analyzed the long-term effect of allowing higher emissions rates in such transitional areas? If so, please provide such analysis. If not, does EPA plan to perform such analysis, and if yes, by when?

During this decade, Clear Skies would help many areas meet the health-based air quality standards for particulate matter faster than they would under the current Clean Air Act. Under Clear Skies, power plants would emit less SO₂ and NO_x during this decade than they would under the current Clean Air Act. In establishing the transitional area designation, Clear Skies relies on the common-sense principle that we should not require local areas to adopt local measures if their air quality problem will be solved in a reasonable time frame by the reductions in power plant emissions required by Clear Skies. The same philosophy was reflected in a 1997 Presidential memo governing implementation of the revised National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter. This memo recognized that where regional controls would bring cost-effective emission reductions, additional controls should not be imposed on local businesses in areas where they were not needed to meet the NAAQS.

The transitional designation would not relax existing emissions standards for non-power sector industries in affected areas. Rather, for areas with this classification, federal law would not require states to develop a new round of more stringent requirements for such industries, as long as air quality modeling forecasts showed that the ozone and PM 2.5 standards would be attained by 2015 under Clear Skies and existing regulatory programs. EPA expects that many Clear Skies Act transitional areas would meet the standards prior to the attainment date of 2015 because Clear Skies provides certain emission reductions. Clear Skies also would simplify state air quality planning and create incentives for states to take early action.

Under Clear Skies two avenues would exist for an area to be designated transitional with an attainment date of 2015.

1) *EPA modeling of Clear Skies projects that the area attains by 2015*

EPA would be required to conduct emissions forecasting and air quality modeling after Clear Skies is enacted. This modeling would consider existing emissions regulations, as well as the expected growth in emissions from stationary, mobile,

and area sources. Where such modeling demonstrates that future air pollution reductions from Clear Skies and other existing control programs would bring an area into attainment with the ozone and/or particulate matter air quality standards by 2015, the area may be designated as transitional.

2) *EPA modeling of Clear Skies projects that the area does not attain by 2015*

If EPA modeling after Clear Skies is enacted projects that an area would not meet the national air quality standards by 2015, it could still qualify for a transitional designation if, by December 2004, the state adopts, and EPA approves, adequate local pollution control measures that, when combined with the benefits of Clear Skies, allow the area to meet the national air quality standards by December 2015. This provision provides states an incentive to submit their air quality plans sooner than required under existing law, in order to be designated transitional.

For those areas not greatly affected by regional emissions from coal-fired power plants, the transitional area designation would not apply. For these areas, such as in California, attainment dates would be governed by the current Clean Air Act

Clear Skies contains a safeguard to protect air quality in the event that subsequent information suggests that assumptions upon which EPA based its modeling (e.g., an area's emissions inventory) turn out to be inaccurate. It would require each transitional area to submit in 2010 an updated emission inventory and an analysis of whether growth would interfere with attainment by 2015. EPA would review the analysis in 2011.

EPA has not conducted any specific quantitative analyses of the effect of this provision, beyond that already contained in the Clear Skies analyses done to date. These current policy analyses, while not of the same character as that done for implementation planning purposes, did factor in projected growth in emissions from new and existing sources in both the Base and Clear Skies control cases. We have already provided this information to the Committee. The level of analyses does not examine the relative effect of additional controls on new or existing sources prompted by non-attainment designations.

15. Under the current Clean Air Act, the National Park Service has authority to review permits for new sources of air pollution to determine whether pollution from these facilities will affect air quality related values such as visibility, ozone smog, fine particles, acid rain, and mercury that would harm park plants and animals.

The Clear Skies legislation limits the Park Service review of air permits for new and existing facilities to facilities located within 50 kilometers (km) (31 miles) of a park boundary. Yet the National Park Service states that approximately 70% of the air pollution affecting Acadia National Park comes from other states, all of which are more than 31 miles from Acadia.

What basis did the Administration use to determine that the Park Service review should be limited to facilities within a 50 km radius of a park? Why did the Administration prefer 50 km to 20 km or 100 km? Does EPA have information on how many pending power plant projects fall within 50 km of a Class I area and how many are beyond this distance? If so, please provide this information.

Clear Skies would require individual new facilities to have, at a minimum, modern pollution controls as specified in section 481 (National Emission Standards for Affected Units) of the Clear Skies Act. Subsequent review by the Federal Land Manager of facilities within the 50 km limit would ensure that the potential impacts of well controlled new sources do not result in significant local effects in Class I areas.

Clear Skies would benefit the ecosystems and air quality in national parks across the country, especially in the eastern states. The reductions in acid rain, eutrophication, mercury deposition and regional haze from Clear Skies would improve these treasured resources. By addressing air pollution from a regional perspective, the transport of air pollution into national parks and wilderness areas would be reduced.

EPA has searched its own database of NSR permit applications and contacted the National Park Service for information they have compiled about NSR permit applications. We can only find one application filed in the past three years for a coal-fired facility that is asking to build or modify a plant within 50 km of a national park. In the snapshot that this review provides, there were about 20 coal-fired power plants within 200 km of a Park that applied for an air pollution permit in the past three years.

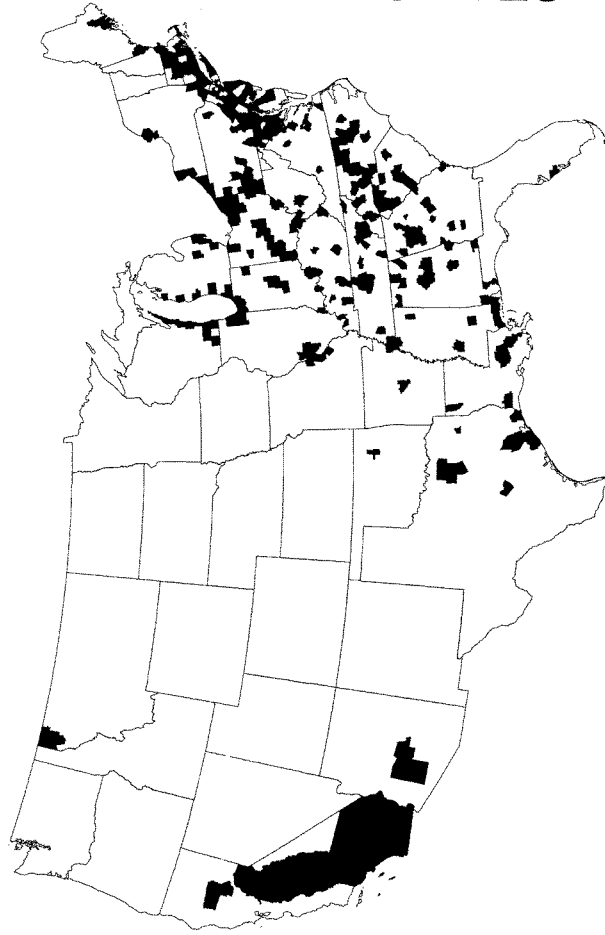
16. According to EPA's most recent modeling, Acadia National Park will receive only a three deciview improvement from the Clear Skies legislation by 2020. The 1999 regional haze rule set a goal of near pristine conditions by 2064. With Clear Skies fully implemented in 2020, revised EPA modeling shows that visitors can expect to be able to see a few additional miles in eastern parks. What safeguard will remain in place under the Clean Air Act to protect and restore visibility in Class I areas if the Clear Skies legislation is adopted?

Clear Skies generally accelerates progress for the national visibility goal, especially in the East, adds safeguards to ensure timely implementation of western programs, and maintains the essential requirements of the current law with respect to long-term regional haze programs. Enacting Clear Skies would advance the progress towards the national visibility goal in our National Parks and Wilderness areas. Under our Regional Haze rule promulgated in 1999, states are required to conduct regional planning and develop initial implementation plans for making reasonable progress toward the national goal. States would also need to develop and submit additional plans by 2018 for making continuing progress. Clear Skies would not remove or alter the fundamental requirements for states to develop and implement regional haze programs. In addition to jumpstarting major emissions reductions of visibility impairing pollutants (SO_x and NO_x) years before they likely would be required under regional haze programs, Clear Skies also provides a backstop program for the Western Regional Air Partnership (WRAP) visibility protection program that would ensure protection for the Grand Canyon and many other western class I areas.

The Clear Skies Act strengthens and accelerates the safeguards contained in the current law in the event some portion of the WRAP proposal is not implemented.

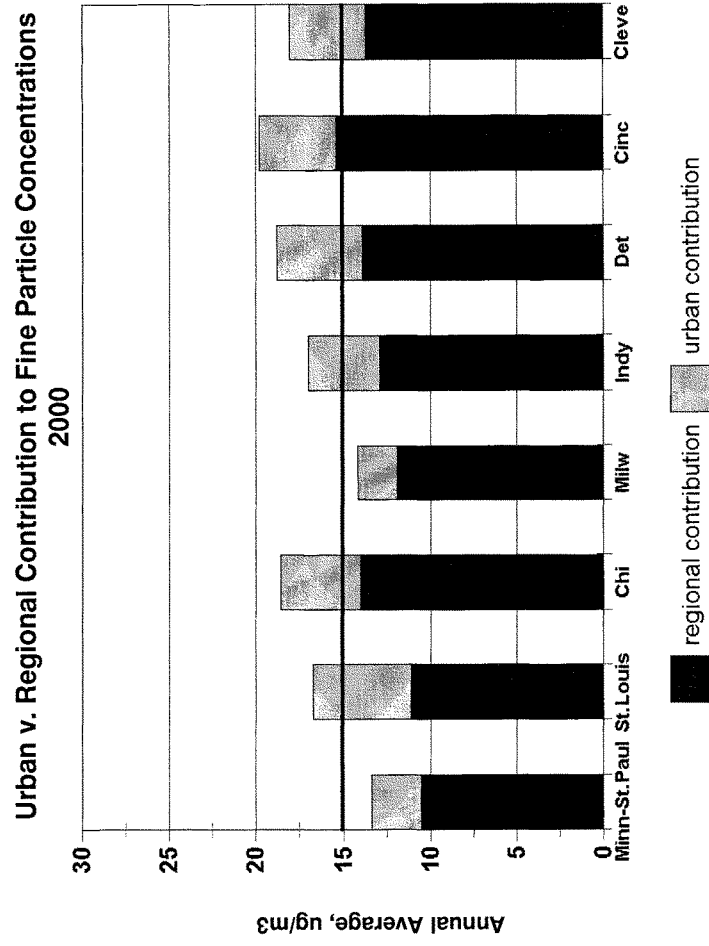
ATTACHMENT A: HEARING SLIDES

**Counties Currently Violating Fine Particle ($PM_{2.5}$) and/or
Ozone Standards (based on 1999-2001 data)**

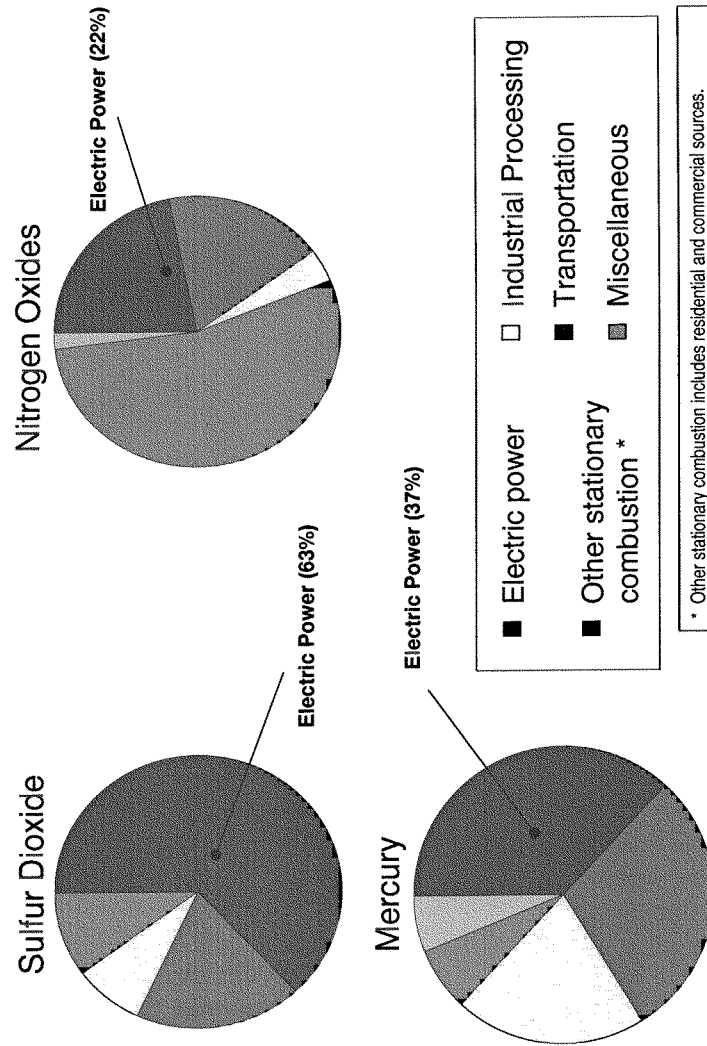


Note: No violating counties in AK, HI, PR, or VI

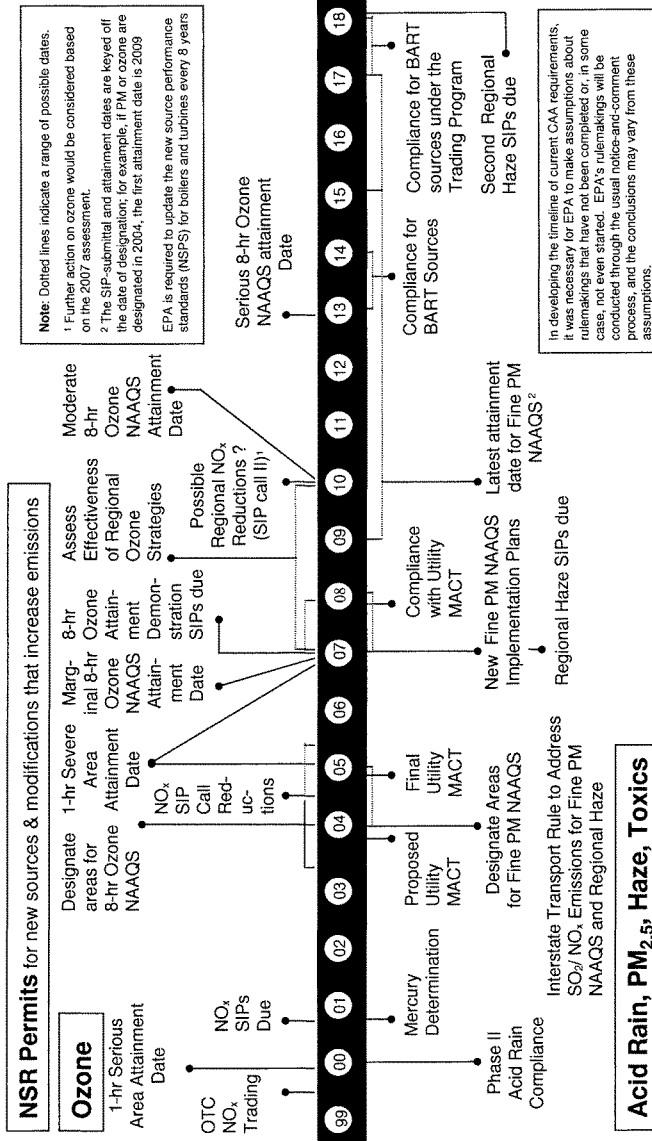
Regional Air Pollution is a Problem



Power Plants are Significant Contributors to Public Health and Environmental Challenges

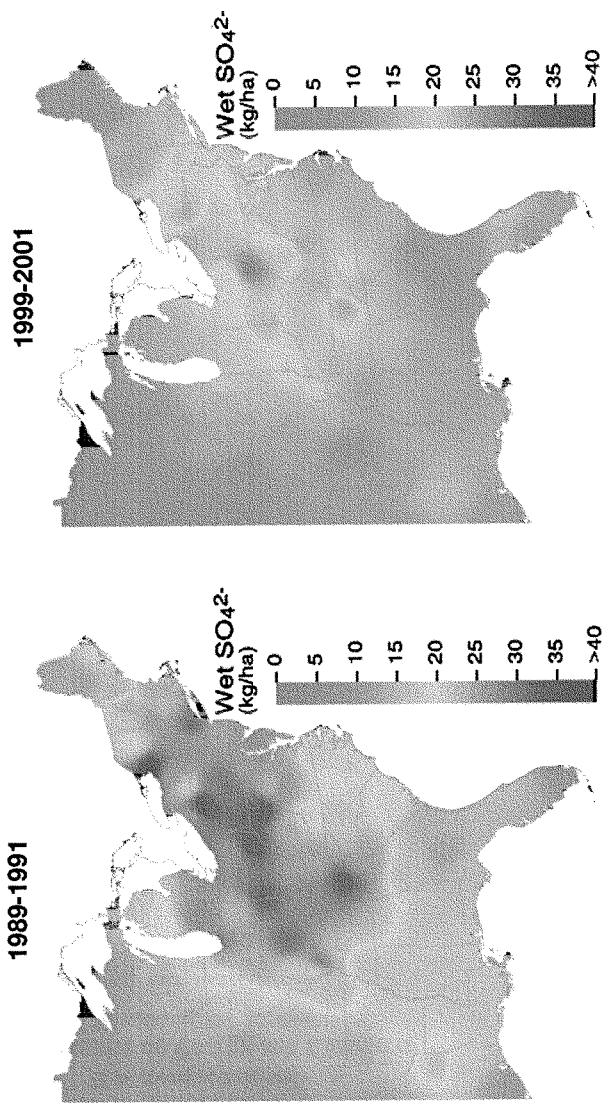


Power Plants Would Face a Complex Set of Requirements Under Current Clean Air Act

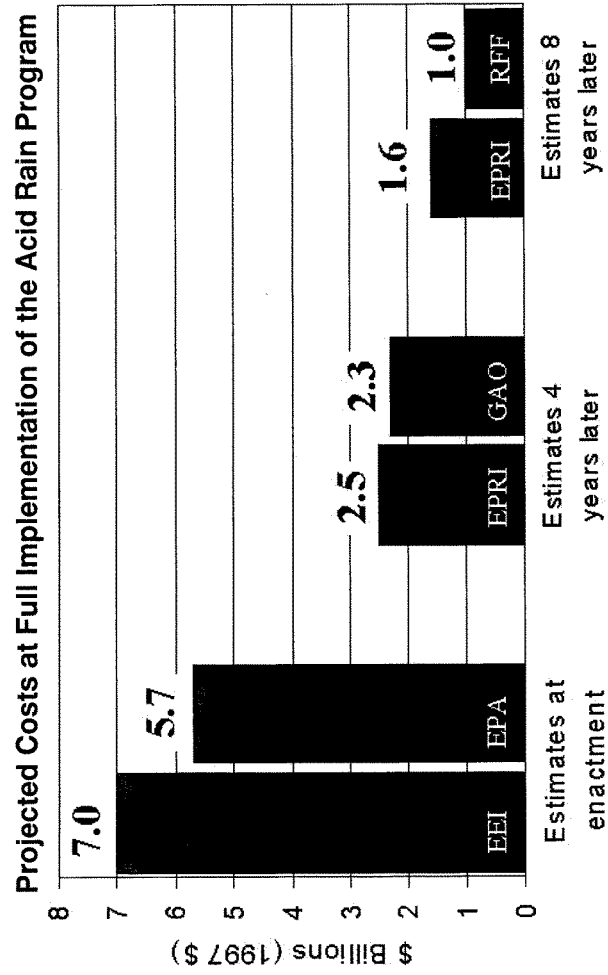


Building on Lessons Learned: Reductions in Acid Rain

Monitored Reductions in Wet Sulfate Deposition Under the Acid Rain Program



Building on Lessons Learned: Costs Lower than Expected

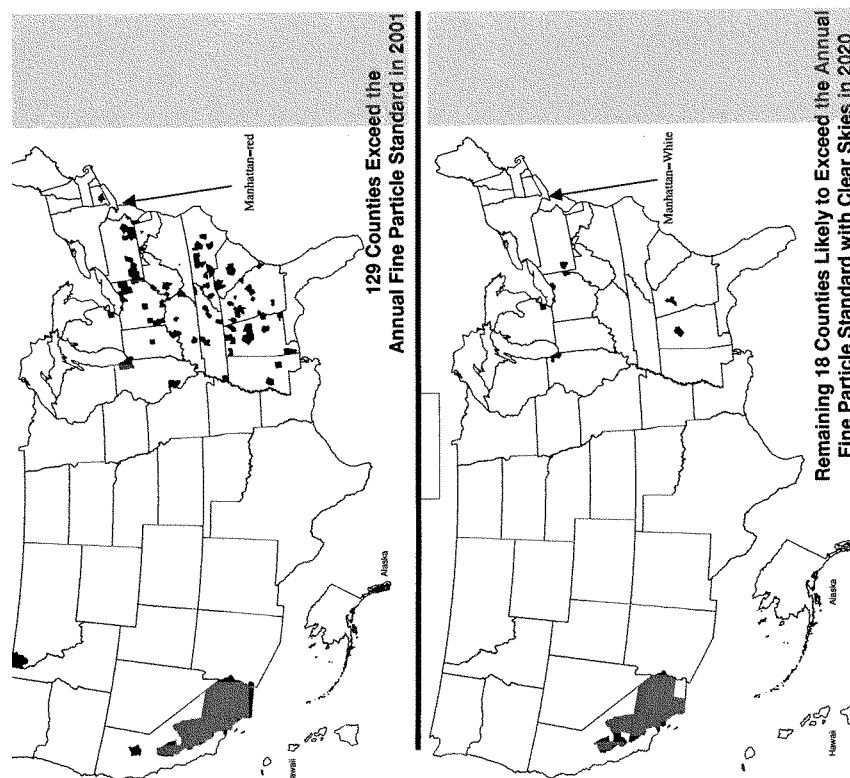


75% Lower than 1990 Projections

Clear Skies Act: Caps and Timing

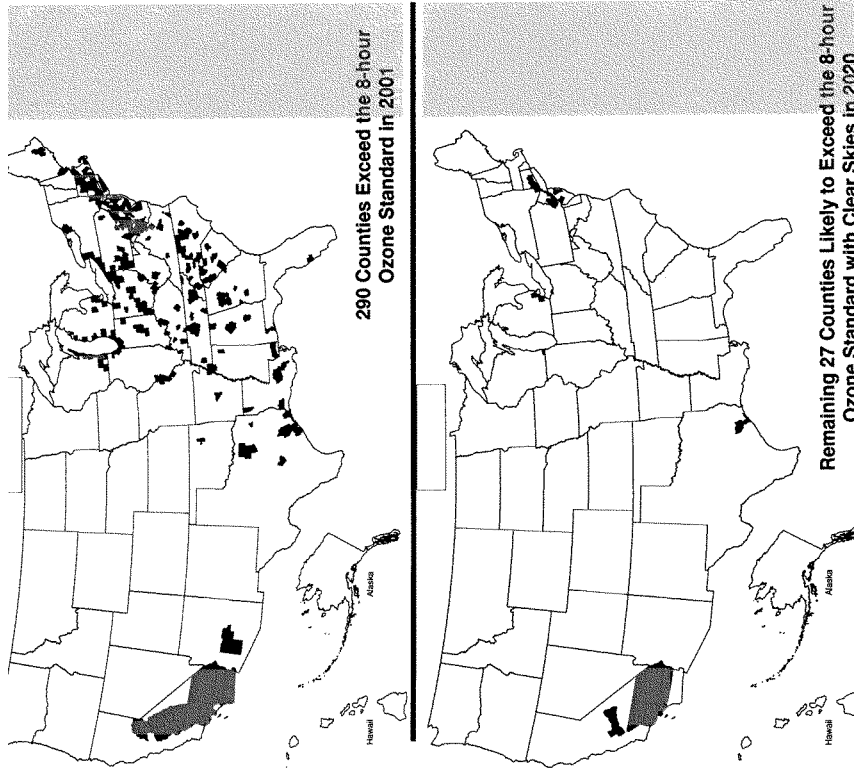
	Emissions (2000)	Phase 1 Cap	Phase 2 Cap	Total Reductions at Full Implementation
Sulfur Dioxide (tons)	11 million	4.5 million (2010)	3 million (2018)	73%
Nitrogen Oxides (tons)	5 million	2.1 million (2008)	1.7 million (2018)	67%
Mercury (tons)	48	26 (2010)	15 (2018)	69%

**Clear Skies with
Other Air Programs
Would
Substantially
Improve Fine
Particle Attainment
over the Next Two
Decades**

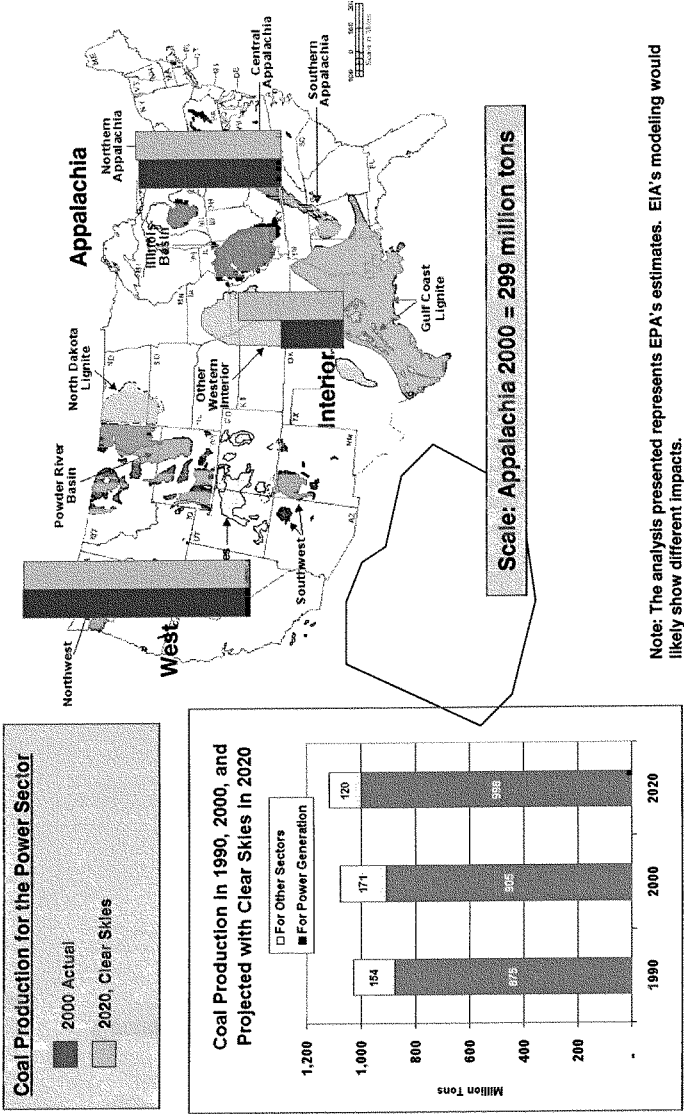


PM2.5 standard = 15 µg/m³

Clear Skies with Other Air Programs Would Substantially Improve Ozone Attainment over the Next Two Decades



Coal Production for Electricity Generation in 1990 and 2000 and Projected Production with Clear Skies in 2020



Benefits Begin Immediately Under Clear Skies

Benefit Category	Annual Avoided Cases in 2010
Premature mortality (Alternative estimate)	7,900 (4,700)
Chronic bronchitis	5,400
Hospitalization/ER visits	17,000
Non-fatal heart attacks	13,000